# **LMA District Cover Sheet**

**Spring 2019 Levee Inspection Results** 

# Reclamation District No. 0501 Ryer Island

	Spring (March - May)	Summer ** (June - August)	Fall (September - November)	Winter ** (December - February)			
† Overall LMA Rating (Fall Only)							
	** Non-receipt of Summ Reports may effect ov						
† SPRING INSPECTIONS: Overall maintenance deficiencies are rated	ratings are not determ d using the same criter			ual maintenance			
	TIONS: The overall maintenance rating shown above is based on operation and maintenance deficiencies identified within the attached unit inspection reports. This rating is not intended to be an indiction of risk.						
Comments							

#### **Unit Cover Sheet**

**Spring 2019 Levee Inspection Results** 

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles
Unit No. 01 Steamboat Slough	Right	6.71

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)				
Date of Inspection	3/12/2019 - 3/12/2019			
DWR Inspector	David Julian			
Accompanied By	Nick Zepeda Reclamation District 501			

#### Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

#### http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

# Levee Inspection Report By Mile - Spring 2019

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Steamboat Slough	Right	6.71	03/12/2019 03/12/2019	David Julian

LM Start		Rating **	Α	Issue No.		57	
LM End		Issue Type +	Ма	Location *			
Cotogony	Earthen L	evee		GPS La	atituc	le/Longitude	
Category				Start		End	
Itom	Item Operations & Maintenance Manuals				0		0
item					0		0
DWR ID	DWR ID DWR_RD0501_01_f _ 2014_57						
Comment Code							
			_				
		Inspecto	or Comm	nent			
District has the O&M Manual.							

No Photos

LM Start		Rating **	Α	Issue No.		58		
LM End		Issue Type +	Ma	Location *				
Earthen Levee				GPS L	atituc	de/Longitude		
Category						End		
Item	Emergency Supplies & Equipment				0		0	
пеш					0		0	
DWR ID	DWR ID DWR_RD0501_01_s _ 2012_58							
	Comment Code							
Inspector Comment								

RD 501 has emergency supplies in storage.

No Photos

LM Start		Rating **	Α	Issue No.		59	
LM End		Issue Type +	Ма	Location *			
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory		Start		End			
Item	Flood Pre	paredness &	Training		0		0
пеш					0		0
DWR ID	DWR_RD0501_01_s _ 2012_59						
		Comn	nent Cod	le			
Inspector Comment							
Crew members have been trained and are prepared for a flood.							

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement

### **Levee Inspection Report By Mile - Spring 2019**

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Steamboat Slough	Right	6.71	03/12/2019 03/12/2019	David Julian

LM Start	<b>0.04</b> Rating ** M		М	Issue No.		145	
LM End	0.04	Issue Type +	En	Location *			
Category	Suppleme	ental		GPS Latitude/Longitude			
Calegory			Start		End		
Item	DWR UC	DWR UCIP Field Study			35 °	38.254035	0
пеш				-121.6017	57°	-121.601757	0
DWR ID	21096						

#### Inspector Comment

Comment Code

FS\_ID:44878 DS\_ID:21096 EP\_NO: 3635

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Marker missing on waterward side--need to contact

owner.

FIELD\_STRUCT\_DESC: 2.5-inch steel telephone conduit through the levee, 3 feet below the crown. Pole at the landside (LS) toe. Rock revetment on the waterside (WS) slope. (Plans for installation of a submarine cable through both levees and under the channel authorized under Permit No. 3635, 1961 - Delta Telephone and Telegraph Company [DT&T]. Plans to bury a submarine cable across the channel authorized under Permit No. 5412, 1966 - General Telephone Company of California).

FS Date: 6/13/2013

LM Start	0.05	Rating **	U	Issue No.		26	
LM End	0.05	Issue Type +	En	Location *	LS		
Category Earthen Levee				GPS Latitude/Longitude			
Calegory			Start		End		
Item	Vegetation			38.25389	95 °	38.253895 °	
пеш	item				37 °	-121.601937°	
DWR ID DWR_RD0501_01_f _ 2018_26							
Comment Code							

V6: Landscaping

Inspector Comment

Trim fig tree to allow access and visibility down the landside slope.

No Photos

No Photos

Location	
LS: Land Side	N/A: Not Applicable
WS: Water Side	
CB · Crown	

A: Acceptable : Minimally Acceptable U : Unacceptable

N: Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence En: Enforcement

# Levee Inspection Report By Mile - Spring 2019

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Steamboat Slough	Right	6.71	03/12/2019 03/12/2019	David Julian

LM Start	0.06	Rating **	М	Issue No.	42		
LM End	0.08	Issue Type +	Ma	Location *	LS		
Category Earthen Levee				GPS Latitude/Longitude			
Calegory			Start		End		
Item	Trim / Thi	n Trees		38.2537	83 °	38.253525	0
пеш				-121.6020	77 °	-121.602265	0
DWR ID DWR_RD0501_01_f _ 2018_42							
Comment Code							

T2: Thin trees to allow visibility of the ground and room to flood fight.

#### Inspector Comment



View looking downstream at relatively thick trees on the landside slope (November 2018).

LM Start	0.11	Rating **	М	Issue No.		Issue No.		24
LM End	0.11 Issue Type + Ma Location *		Type + Ma Location *		Issue Type + Ma Loc			WS
Category Earthen Levee				GPS La	atitud	le/Longitude		
Calegory						End		
Item	Trim / Thi	n Trees		38.2532	17°	38.253217°		
пеш				-121.6024	80°	-121.602480 °		
DWR ID DWR_RD0501_01_s _ 2019_24								

T1 : Trim trees to at least five feet above ground level.

#### Inspector Comment

Comment Code

Trim trees within 20 feet of the crown.

### Photo 1 of 1: SP\_2019\_RD0501\_169\_24\_20190314\_00066.jpg



View looking downstream at trees within 20' of the levee crown (Spring 2019).

LM Start	0.14	Rating **	M	Issue No.		43		
LM End	0.16	Issue Type +	Ma	Location *		LS		
Category	Category Earthen Levee				atitud	e/Longitude		
Calegory			Start		End			
Item	Trim / Thi	n Trees		38.2527	90 °	38.252548	c	
пеш				-121.6027	05 °	-121.602805	c	
DWR ID	DWR ID DWR_RD0501_01_f _ 2018_43							
	Comment Code							

T2: Thin trees to allow visibility of the ground and room to flood fight.

#### Inspector Comment

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Spring 2019

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Steamboat Slough	Right	6.71	03/12/2019 03/12/2019	David Julian

LM Start	0.19	Rating **	М	Issue No.	146			
LM End	0.19	Issue Type +	En	Location *				
Category				GPS Latitude/Longitude				
Category				Start		End		
Item	DWR UC	P Field Study		38.25214	10°	38.252140°		
пеш				-121.60290	)2 °	-121.602902 °		
DWR ID	21030			'				
	Comment Code							

#### Inspector Comment

FS\_ID:53350 DS\_ID:21030 EP\_NO: 4581

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 07/24/2018 Same as last inspection. Appears not in use; WS appears not in use due to pipe disconnection, but cannot confirm based on LS connections being intact. PVC pipe sleeved through levee, so downgrading to Non-Urgent. Recommend internal pipe inspection (D. Sanoski - DWR UCIP).8/22/2016 Sacramento County has re-paved road and patch is no longer present. Crossing remains to be Urgent due to the unknown condition of the section of the levee along pipe alignment. Unable to determine if any internal erosion is present along pipe. According to LMA representative, Stacy Boyd, no additional sink holes have developed since 2013. No sink holes have been noticed since PVC pipe was sleeved through existing steel pipe. Permit authorizing work is not available. Need to identify current owner. Owner will need to coordinate with CVFPB to remove or abandon crossing per Title 23 requirements. (DWR UCIP -

omagana)6/04/2013 Damage present on levee crown--unable to confirm if damage due to leak in pipe. Signs of repair work on crown, however, no permit found to document recent damage to levee or repair work. New PVC pipe has been sleeved through the existing 6-inch pipe. Unable to determine if crossing is still in use, if not, crossings needs to be removed according to CVFPB Title 23 requirements. (DWR UCIP - omagana)

FIELD\_STRUCT\_DESC: \*ABANDONED\* 6-inch steel irrigation discharge pipe through the levee, 2.5 feet below the crown. 2-inch steel electrical conduit through the levee, at an unknown depth. Cutoff wall around the pipe at the center of the levee. Pump and gate valve in a pump house on the waterside (WS) slope. Service pole on the landside (LS) slope. Pipe is exposed on each slope. (Plans for removing and replacing an irrigation pipe through the levee authorized under Permit No. 4581, 1964 - Walter Light). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959, (HLM 0.2), 7-inch pipe, 2.6 feet below the crown, referenced]. FS Date: 7/24/2018 11:20:00 AM



View of crown at crossing.

### Levee Inspection Report By Mile - Spring 2019

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Steamboat Slough	Right	6.71	03/12/2019 03/12/2019	David Julian

LM Start	0.19	Rating **	М	Issue No.		146 (cont)
LM End	0.19	Issue Type +	En	Location *		
Category	ental	GPS Latitude/Longitude				
Calegory			Start		End	
Item	DWR UC	IP Field Study		38.2521	40°	38.252140 °
пеш			-121.6029	02 °	-121.602902 °	
DWR ID	21030					

# Comment Code

#### Inspector Comment

FS\_ID:53350 DS\_ID:21030 EP\_NO: 4581

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 07/24/2018 Same as last inspection. Appears not in use: WS appears not in use due to pipe disconnection, but cannot confirm based on LS connections being intact. PVC pipe sleeved through levee, so downgrading to Non-Urgent. Recommend internal pipe inspection (D. Sanoski - DWR UCIP).8/22/2016 Sacramento County has re-payed road and patch is no longer present. Crossing remains to be Urgent due to the unknown condition of the section of the levee along pipe alignment. Unable to determine if any internal erosion is present along pipe. According to LMA representative, Stacy Boyd, no additional sink holes have developed since 2013. No sink holes have been noticed since PVC pipe was sleeved through existing steel pipe. Permit authorizing work is not available. Need to identify current owner. Owner will need to coordinate with CVFPB to remove or abandon crossing per Title 23 requirements. (DWR UCIP omagana)6/04/2013 Damage present on levee crown--unable to confirm if damage due to leak in pipe. Signs of repair work on crown, however, no permit found to document recent damage to levee or repair work. New PVC pipe has been sleeved through the existing 6-inch pipe. Unable to determine if crossing is still in use, if not, crossings needs to be removed according to CVFPB Title 23 requirements. (DWR UCIP -

FIELD\_STRUCT\_DESC: \*ABANDONED\* 6-inch steel irrigation discharge pipe through the levee, 2.5 feet below the crown. 2-inch steel electrical conduit through the levee, at an unknown depth. Cutoff wall around the pipe at the center of the levee. Pump and gate valve in a pump house on the waterside (WS) slope. Service pole on the landside (LS) slope. Pipe is exposed on each slope. (Plans for removing and replacing an irrigation pipe through the levee authorized under Permit No. 4581, 1964 - Walter Light). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959, (HLM 0.2), 7-inch pipe, 2.6 feet below the crown, referenced]. FS Date: 7/24/2018 11:20:00 AM

Photo 2 of 3: UCIP\_SP\_2019\_53350\_58922.jpg



Subsidence and patch work repair on crown.

### Levee Inspection Report By Mile - Spring 2019

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Steamboat Slough	Right	6.71	03/12/2019 03/12/2019	David Julian

LM Start	0.19	Rating **	М	Issue No.		146 (cont)
LM End	0.19	Issue Type +	En	Location *		
Category Supplemental				GPS Latitude/Longitude		
Calegory			Start		End	
Item	DWR UC	IP Field Study		38.25214	40 °	38.252140 °
пеш			-121.60290	)2 °	-121.602902 °	
DWR ID	21030					

#### Comment Code

#### Inspector Comment

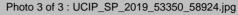
FS\_ID:53350 DS\_ID:21030 EP\_NO: 4581

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 07/24/2018 Same as last inspection. Appears not in use: WS appears not in use due to pipe disconnection, but cannot confirm based on LS connections being intact. PVC pipe sleeved through levee, so downgrading to Non-Urgent. Recommend internal pipe inspection (D. Sanoski - DWR UCIP).8/22/2016 Sacramento County has re-payed road and patch is no longer present. Crossing remains to be Urgent due to the unknown condition of the section of the levee along pipe alignment. Unable to determine if any internal erosion is present along pipe. According to LMA representative, Stacy Boyd, no additional sink holes have developed since 2013. No sink holes have been noticed since PVC pipe was sleeved through existing steel pipe. Permit authorizing work is not available. Need to identify current owner. Owner will need to coordinate with CVFPB to remove or abandon crossing per Title 23 requirements. (DWR UCIP omagana)6/04/2013 Damage present on levee crown--unable to confirm if damage due to leak in pipe. Signs of repair work on crown, however, no permit found to document recent damage to levee or repair work. New PVC pipe has been sleeved through the existing 6-inch pipe. Unable to determine if crossing is still in use, if not, crossings needs to be removed according to CVFPB Title 23 requirements. (DWR UCIP -

FIELD\_STRUCT\_DESC: \*ABANDONED\* 6-inch steel irrigation discharge pipe through the levee, 2.5 feet below the crown. 2-inch steel electrical conduit through the levee, at an unknown depth. Cutoff wall around the pipe at the center of the levee. Pump and gate valve in a pump house on the waterside (WS) slope. Service pole on the landside (LS) slope. Pipe is exposed on each slope. (Plans for removing and replacing an irrigation pipe through the levee authorized under Permit No. 4581, 1964 - Walter Light). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959, (HLM 0.2), 7-inch pipe, 2.6 feet below the crown, referenced].

FS Date: 7/24/2018 11:20:00 AM





Overview of WS--pump, abandoned pipe section, and conduit.

# Levee Inspection Report By Mile - Spring 2019

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Steamboat Slough	Right	6.71	03/12/2019 03/12/2019	David Julian

LM Start	0.22	Rating **	М	Issue No.		44	
LM End	0.28	Issue Type +	En	Location *	LS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Vegetatio	n		38.2515	98°	38.250730°	
пеш				-121.603068 °		-121.603190°	
DWR ID	DWR_RD0	501_01_f _ 201	8_44				
		Comn	nent Cod	le			
V6 : Lands	caping						
Inspector Comment							
Landscapi	ng trees a	e obstructing	view dov	wn the land	side	slope.	

Photo 1 of 1: SP\_2019\_RD0501\_169\_44\_20190311\_00011.jpg

View looking downstream at landscaping trees on the landside slope (November 2018).

LM Start	0.28	Rating **	М	Issue No.		27			
LM End	0.28	Issue Type +	En	Location *		LS			
Category Earthen Levee			GPS Latitude/Longitude						
Category				Start		End			
Item	Vegetation			38.250809°		38.250809°			
пеш				-121.603119 °		-121.603119°			
DWR ID	DWR_RD0	501_01_f _ 201	7_27						
		Comn	nent Cod	le					
V6 : Landscaping									

Inspector Comment

Trim fig trees to allow inspection and access to landside slope and toe.



View of fig trees on the landside slope and toe.

### **Levee Inspection Report By Mile - Spring 2019**

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Steamboat Slough	Right	6.71	03/12/2019 03/12/2019	David Julian

LM Start	0.39	Rating **	М	Issue No.		147
LM End	0.39	Issue Type +	En	Location *		
Category			GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR UC	IP Field Study		38.24919	97 °	38.249197°
пеш				-121.60306	61 °	-121.603061 °
DWR ID	21031					

### Comment Code

#### Inspector Comment

FS\_ID:32524 DS\_ID:21031 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Dense vegetation limits the inspector's visibilty to identify signs of leaks through the slope. Recommend removing vegetation along pipe aligment for reinspection. Need to contact the

unknown material and a 2.5-inch electrical conduit of an unknown material through the levee, both 7.8 feet below the crown. Pump and gate valve in a pump house on the landside (LS) slope. Pipe exposed along the waterside (WS) slope. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959, (HLM 0.4), irrigation siphon referenced].

En

Issue No.

Location \*

Rating \*\*

Issue Type +

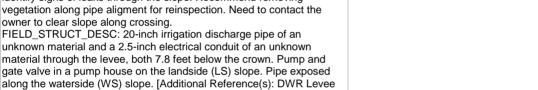
FS Date: 6/4/2013

0.39

0.39

LM Start

LM End



147 (cont)



View of crown



Overview of landside. Pump house and power pole visible on landward side.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement

# Levee Inspection Report By Mile - Spring 2019

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Steamboat Slough	Right	6.71	03/12/2019 03/12/2019	David Julian

LM Start	0.39	Rating **	М	Issue No.		147 (cont)
LM End	0.39	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS Latitude/Longit		e/Longitude
Calegory				Start		End
Item	DWR UC	IP Field Study		38.24919	7°	38.249197 °
пеш				-121.60306	1 °	-121.603061 °
DWR ID	21031					

#### Comment Code

#### Inspector Comment

FS\_ID:32524 DS\_ID:21031 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Dense vegetation limits the inspector's visibilty to identify signs of leaks through the slope. Recommend removing vegetation along pipe aligment for reinspection. Need to contact the owner to clear slope along crossing.

FIELD\_STRUCT\_DESC: 20-inch irrigation discharge pipe of an unknown material and a 2.5-inch electrical conduit of an unknown material through the levee, both 7.8 feet below the crown. Pump and gate valve in a pump house on the landside (LS) slope. Pipe exposed along the waterside (WS) slope. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959, (HLM 0.4), irrigation siphon referenced].

FS Date: 6/4/2013



Crown hinge point damaged, roadway section missing.

### Levee Inspection Report By Mile - Spring 2019

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Steamboat Slough	Right	6.71	03/12/2019 03/12/2019	David Julian

LM Start	0.44	Rating **	М	Issue No.		148	
LM End	0.44	Issue Type +	En	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UC	IP Field Study		38.2485	19°	38.248519°	
пеш				-121.602972 ° -121.60297			
DWR ID	DWR ID 21032						
	Comment Code						

#### Inspector Comment

FS\_ID:41409 DS\_ID:21032 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Need to contact owner and ask for emergency contact infomation and permit number. 8/21/13 Contacted Gas Control Division under the emergency contact No. 1-877-723-3344. Message has been forward to Brian Habersack at 916-859-4700, email: bhabersack@gasbiz.com.

FIELD\_STRUCT\_DESC: 6-inch steel natural gas pipeline under the levee, 60 feet below the crown. Gas line marker on each shoulder. (Plans to install a 6-inch steel natural gas pipeline across and bored under the channel and each levee authorized under Permit No. 17033, 1999 - Delta Gas Gathering, Inc., and A. A. Production Services, Inc.). [Additional Reference(s): DWR Levee Log, 2005]. FS Date: 6/4/2013

LM Start	0.44	Rating **	М	Issue No.	148 (cont)
LM End	0.44	Issue Type +	En	Location *	



Overview of waterside at crossing. Marker on shoulder.

#### Photo 2 of 3: UCIP\_SP\_2019\_41409\_58930.jpg



Overview of landside at crossing. Marker on shoulder.

# Levee Inspection Report By Mile - Spring 2019

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Steamboat Slough	Right	6.71	03/12/2019 03/12/2019	David Julian

LM Start	0.44	Rating **	М	Issue No.		148 (cont)	
LM End	0.44	Issue Type +	En	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory	Category			Start		End	
Item	DWR UC	P Field Study		38.2485	19°	38.248519°	
пеш				-121.602972 ° -121.6029			
DWR ID 21032							
	Comment Code						

#### Inspector Comment

FS\_ID:41409 DS\_ID:21032 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Need to contact owner and ask for emergency contact infomation and permit number. 8/21/13 Contacted Gas Control Division under the emergency contact No. 1-877-723-3344. Message has been forward to Brian Habersack at 916-859-4700, email: bhabersack@gasbiz.com.

FIELD\_STRUCT\_DESC: 6-inch steel natural gas pipeline under the levee, 60 feet below the crown. Gas line marker on each shoulder. (Plans to install a 6-inch steel natural gas pipeline across and bored under the channel and each levee authorized under Permit No. 17033, 1999 - Delta Gas Gathering, Inc., and A. A. Production Services, Inc.). [Additional Reference(s): DWR Levee Log, 2005].

FS Date: 6/4/2013



Gas line contact infomation on the sign.

LM Start	0.47	Rating **	М	Issue No.		25	
LM End	0.53	Issue Type +	Ma	Location *	WS		
Category	Suppleme	ental	GPS Latitude/Longitude		GPS Latitude/Longitude		
Calegory				Start		End	
Item		ACE Erosion S	Survey,	38.2480	25 °	38.247156	0
пеш	DRAFT			-121.6027	61 °	-121.602669	0
DWR ID	DWR_RD0	501_01_f _ 201	8_25				
	Comment Code						

#### Inspector Comment

2017 Site ID: STM 21.2 R Status: Eroding New

2017 Field Notes: Difficult to observe due to high vegetation.

Site History: 2016 - Large slump section.

2018: Difficult to see due to dense vegetation on water side toe

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS : Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

# **Levee Inspection Report By Mile - Spring 2019**

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Steamboat Slough	Right	6.71	03/12/2019 03/12/2019	David Julian

LM Start	0.47	Rating **	М	Issue No.		45			
LM End	0.47	Issue Type +	En	Location *	LS				
Category	Earthen L	evee		GPS La	atitud	e/Longitude			
Calegory				Start		End			
Item	Encroach	Encroachments			57°	38.247957 °			
item				-121.602965 °		-121.602965 °			
DWR ID	DWR_RD0	501_01_f _ 201	8_45						
		Comn	nent Cod	le					
PR : Pruni	ngs								
Inspector Comment									
Remove prunings from the landside toe.									

Photo 1 of 1 : SP\_2019\_RD0501\_169\_45\_20190311\_00012.jpg

View of prunings on the landside toe (November 2018).

LM Start	0.57	Rating **	М	Issue No.		28	
LM End	0.57	Issue Type +	En	Location *	LS		
Catagory Earthen Levee				GPS Latitude/Longitude			
Category				Start		End	
Item	Vegetation				90°	38.246590 °	
пеш				-121.6028	33 °	-121.602833 °	
DWR ID DWR_RD0501_01_s _ 2019_28							
		_	_	-			

#### Comment Code

V6 : Landscaping

#### Inspector Comment

Remove cactus on the landside toe.



View of cactus on the landside toe (Spring 2019).

LM Start	0.68	Rating **	М	Issue No.		18	
LM End	0.71	Issue Type +	En	Location *		LS	
Category	Earthen L	.evee		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item	Vegetatio	n		38.2450	10°	38.244523	c
пеш				-121.6029	55 °	-121.602940	c
DWR ID	DWR_RD0	501_01_s _ 201	2_18				
		Comn	nent Cod	le			

V6: Landscaping

#### Inspector Comment

Trim the trees on the landside levee slope five feet above the ground.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

### **Levee Inspection Report By Mile - Spring 2019**

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Steamboat Slough	Right	6.71	03/12/2019 03/12/2019	David Julian

LM Start	0.70	Rating **	М	Issue No.		149
LM End	0.70	Issue Type +	En	Location *		
Category Supplemental				GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UC	IP Field Study		38.24472	6°	38.244726 °
пеш				-121.60290	o°	-121.602900 °
DWR ID	21089					

#### Comment Code

#### Inspector Comment

FS\_ID:44643 DS\_ID:21089 EP\_NO: 2683

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: Appears abandoned and if so should be done so

properly

FIELD\_STRUCT\_DESC: \*ABANDONED\* 2-inch steel water pipe and a 1-inch steel electrical conduit through the levee, both 3 feet below the crown. Portion of pipe visible under the oleanders on the landside (LS) shoulder, may be part of this crossing. No evidence remains on the waterside (WS) slope. (Plans for installation of an electrical conduit and a water pipe through the levee authorized under Permit No. 2683, 1957 - John Gosner).

FS Date: 4/21/2015

LM Start	0.70	Rating **	М	Issue No.	149 (cont)
LM End	0.70	Issue Type +	En	Location *	



Pipes visilbe under oleander on LS shoulder.

Photo 2 of 3: UCIP\_SP\_2019\_44643\_73841.jpg



Pipes visilbe under oleander on LS shoulder.

### **Levee Inspection Report By Mile - Spring 2019**

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Steamboat Slough	Right	6.71	03/12/2019 03/12/2019	David Julian

LM Start	0.70	Rating **	М	Issue No.		149 (cont)
LM End	0.70	Issue Type +	En	Location *		
Category		GPS Lat	itud	e/Longitude		
Calegory				Start		End
Item	DWR UC	IP Field Study		38.24472	6°	38.244726 °
пеш				-121.60290	0 °	-121.602900 °
DWR ID	21089					

#### Comment Code

#### Inspector Comment

FS\_ID:44643 DS\_ID:21089 EP\_NO: 2683

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: Appears abandoned and if so should be done so

properly.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 2-inch steel water pipe and a 1-inch steel electrical conduit through the levee, both 3 feet below the crown. Portion of pipe visible under the oleanders on the landside (LS) shoulder, may be part of this crossing. No evidence remains on the waterside (WS) slope. (Plans for installation of an electrical conduit and a water pipe through the levee authorized under Permit No. 2683, 1957. [John Gospon]

1957 - John Gosner). FS Date: 4/21/2015



Pipes visilbe under oleander on LS shoulder.

LM Start	0.70	Rating **	M	Issue No.		71	
LM End	1.21	Issue Type +	Ma	Location *		LS	
Category Earthen Levee				GPS Latitude/Longitude			
Calegory				Start		End	
Item	Animal Co	ontrol		38.2446	67°	38.237470	0
пеш				-121.6029	67 °	-121.604418	•
DWR ID	DWR_RD0	501_01_s _ 201	2_71				

#### Comment Code

A1: Exterminate rodents and backfill and compact or grout burrows.

#### Inspector Comment

District has done baiting in this area and says rodents haven't been seen around this area anymore. Backfill holes and continue monitoring.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Spring 2019

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Steamboat Slough	Right	6.71	03/12/2019 03/12/2019	David Julian

LM Start	0.76	Rating **	М	Issue No.		29	
LM End	1.01	Issue Type + Ma Location		Location *		LS	
Category	Earthen L	evee	GPS Latitude/Longitude				
Calegory	Category					End	
Item	Vegetatio	n		38.24381	5 °	38.240257	0
пеш			-121.60307	7 °	-121.603873	0	
DWR ID	DWR_RD0501_01_f _ 2018_29						

#### Comment Code

V2: Remove the wild growth other than native grasses from the levee slopes.

#### Inspector Comment

Landside slope is covered in blackberry vines. Should be removed to allow inspection and access.

#### Photo 1 of 1: SP\_2019\_RD0501\_169\_29\_20190311\_00004.jpg



View of landside slope covered in blackberry vines.

LM Start	0.97	Rating ** M		Issue No.		150
LM End	0.97	Issue Type +	Location *			
Category	Suppleme		GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR UC	IP Field Study		38.24080	8 °	38.240808 °
пеш					8 °	-121.603628°
DWR ID	21034					

# Comment Code Inspector Comment

FS\_ID:50020 DS ID:21034 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 8/22/2016 Crossing has been downgraded from Urgent to Non-Urgent -- no evidence of damage to levee is present. Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) throught he slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Also will need to coordinate with owner to determine if permit was obtained for the modifications made to crossing (PVC pipe sleeved through existing pipe). (DWR UCIP - omagana)4/21/2015 Unauthorized PVC pipe. Annular space not grouted. 14-inch pipe open on both ends. (DWR UCIP - omagana)

FIELD\_STRUCT\_DESC: 14-inch steel irrigation siphon pipe through the levee, 3.2 feet below the crown. 10-inch polyvinyl chloride (PVC) pipe sleeved through the 14-inch pipe. Siphon breaker on the landside (LS) shoulder. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959, (HLM 1.0)].

FS Date: 8/22/2016

# Photo 1 of 3: UCIP\_SP\_2019\_50020\_75648.jpg



View of levee crown and LS shoulder.

# Levee Inspection Report By Mile - Spring 2019

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Steamboat Slough	Right	6.71	03/12/2019 03/12/2019	David Julian

LM Start	0.97	<b>0.97</b> Rating ** M				150 (cont)	
LM End	0.97	0.97 Issue Type + En I					
Category	Suppleme	ental	GPS Latitude/Longitude				
Calegory				Start		End	
Item	DWR UC	IP Field Study		38.240808	3°	38.240808	0
пеш				-121.603628	°	-121.603628	0
DWR ID	21034						

#### Inspector Comment

Comment Code

FS\_ID:50020 DS\_ID:21034 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 8/22/2016 Crossing has been downgraded from Urgent to Non-Urgent -- no evidence of damage to levee is present. Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) throught he slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Also will need to coordinate with owner to determine if permit was obtained for the modifications made to crossing (PVC pipe sleeved through existing pipe). (DWR UCIP - omagana)4/21/2015 Unauthorized PVC pipe. Annular space not grouted. 14-inch pipe open on both ends. (DWR UCIP - omagana)

FIELD\_STRUCT\_DESC: 14-inch steel irrigation siphon pipe through the levee, 3.2 feet below the crown. 10-inch polyvinyl chloride (PVC) pipe sleeved through the 14-inch pipe. Siphon breaker on the landside (LS) shoulder. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959, (HLM 1.0)].

FS Date: 8/22/2016

LM Start	0.97 Rating **		М	Issue No.	150 (cont)
LM End	0.97	Issue Type +	En	Location *	

#### Photo 2 of 3: UCIP\_SP\_2019\_50020\_75647.jpg



View of levee crown looking at waterside.

#### Photo 3 of 3: UCIP\_SP\_2019\_50020\_75645.jpg



Dense vegetation covers WS--pipe slightly visible through vegetation.

# **Levee Inspection Report By Mile - Spring 2019**

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Steamboat Slough	Right	6.71	03/12/2019 03/12/2019	David Julian

LM Start	1.01	Rating **	М	Issue No.		46	
LM End	1.19	Issue Type + Ma Location *		Location *		LS	
Category	Earthen L	evee	GPS Lati	ude	e/Longitude		
Calegory	Category					End	
Item	Trim / Thi	n Trees		38.240262	٥	38.237758	0
пеш				-121.603878	٥	-121.604453	0
DWR ID	DWR_RD0501_01_f _ 2018_46						

Comment Code

Rating \*\*

Issue Type +

LM Start

LM End

Category

Item

1.01

1.11

Vegetation

Earthen Levee

DWR ID DWR RD0501 01 f 2017 31

T2: Thin trees to allow visibility of the ground and room to flood fight.

Inspector Comment

Issue No.

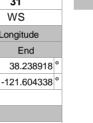
Location \*

38.240222°

-121.603887°

Photo 1 of 1: SP\_2019\_RD0501\_169\_31\_20190311\_00006.jpg

No Photos



31

WS

End

GPS Latitude/Longitude

Comment Code

Ma

V2 : Remove the wild growth other than native grasses from the levee slopes.

### Inspector Comment

Waterside vegetation should be thinned/removed to 20' from WS shoulder to allow inspection and access.



View of waterside vegetation.

Photo 1 of 1: SP\_2019\_RD0501\_169\_35\_20190314\_00068.jpg

LM Start	1.83	Rating **	М	Issue No.		35
LM End	1.83	Issue Type +	Issue Type + Ma			LS
Category	Earthen L	Earthen Levee				e/Longitude
Calegory				Start		End
Item	Vegetatio	n		38.2286	12°	38.228612 °
пеш					20°	-121.604120 °
DWR ID	DWR_RD0501_01_s _ 2019_35					

#### Comment Code

V2: Remove the wild growth other than native grasses from the levee slopes.

#### Inspector Comment

Remove blackberry bushes on the levee slope.



View looking downstream at blackberries on the landside toe (Spring 2019).

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement

# Levee Inspection Report By Mile - Spring 2019

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Steamboat Slough	Right	6.71	03/12/2019 03/12/2019	David Julian

LM Start	1.83	Rating **	М	Issue No.		36	
LM End	1.83	Issue Type +	En	Location *		LS	
Category	Earthen Levee			GPS Latitude/Longitude			
Calegory						End	
Item	Encroach	ments		38.2286	12°	38.228612 °	
пеш			-121.60412	20 °	-121.604120 °		
DWR ID	DWR ID DWR_RD0501_01_s _ 2019_36						

Comment Code

DE: Debris

#### Inspector Comment

Metal debris on the landside slope preventing LMA from completing vegetation maintenance on levee slope.

Photo 1 of 1 : SP\_2019\_RD0501\_169\_36\_20190314\_00069.jpg



View of some of the metal debris on the landside toe (Spring 2019).

LM Start	1.84	Rating **	М	Issue No.		151
LM End	1.84	Issue Type +	En	Location *		
Category	Supplemental			GPS La	atitud	e/Longitude
Calegory				Start		End
Item	DWR UC	IP Field Study		38.2283	73°	38.228373 °
item	tem				20°	-121.604120 °
DWR ID	21086					•

#### Comment Code

#### Inspector Comment

FS\_ID:47516 DS\_ID:21086 EP\_NO: 13233

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Annular space between pipes not grouted. FPIIB Inspector Herman Phillips will contact owner regarding lack of permit for sand filters. Steel plate partially covers openings between pipes. FIELD\_STRUCT\_DESC: 14-inch coated steel irrigation discharge pipe through the levee, 2.5 feet below the crown. 8-inch steel pipe sleeved through the 14-inch pipe. Cutoff wall around the pipe at the center of the levee. Pump and check valve in a pump house on the waterside (WS) slope. Service pole on the landside (LS) slope. A 1.5-inch and a 2.5inch electrical conduits at the same location. Siphon breaker on each shoulder. (Plans to replace a 12-inch irrigation pipe through the levee authorized under Permit No. 11813, 1976 - Harry H. Rasmussen. Plans to replace irrigation pipe with a 14-inch pipe through the levee authorized under Permit No. 13233, 1981 - Harry H. Rasmussen. Plans to install an 8-inch steel pipe through an existing 14-inch pipe through the levee authorized under Permit No. 11813-1, 2013 - Matt Davis). FS Date: 4/21/2015

### Photo 1 of 3: UCIP\_SP\_2019\_47516\_73857.jpg



Sand filter plant on LS toe.

### **Levee Inspection Report By Mile - Spring 2019**

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Steamboat Slough	Right	6.71	03/12/2019 03/12/2019	David Julian

LM Start	1.84	Rating **	М	Issue No.		151 (cont)
LM End	1.84	Issue Type +	En	Location *		
Category	Suppleme	GPS La	titud	e/Longitude		
Calegory	Category					End
Item	DWR UC	IP Field Study		38.2283	73 °	38.228373 °
пеш			-121.60412	20 °	-121.604120 °	
DWR ID	21086					

#### Comment Code

#### Inspector Comment

FS\_ID:47516 DS\_ID:21086 EP NO: 13233

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Annular space between pipes not grouted. FPIIB Inspector Herman Phillips will contact owner regarding lack of permit for sand filters. Steel plate partially covers openings between pipes. FIELD\_STRUCT\_DESC: 14-inch coated steel irrigation discharge pipe through the levee, 2.5 feet below the crown. 8-inch steel pipe sleeved through the 14-inch pipe. Cutoff wall around the pipe at the center of the levee. Pump and check valve in a pump house on the waterside (WS) slope. Service pole on the landside (LS) slope. A 1.5-inch and a 2.5inch electrical conduits at the same location. Siphon breaker on each shoulder. (Plans to replace a 12-inch irrigation pipe through the levee authorized under Permit No. 11813, 1976 - Harry H. Rasmussen. Plans to replace irrigation pipe with a 14-inch pipe through the levee authorized under Permit No. 13233, 1981 - Harry H. Rasmussen. Plans to install an 8-inch steel pipe through an existing 14-inch pipe through the levee authorized under Permit No. 11813-1, 2013 - Matt Davis). FS Date: 4/21/2015

LM Start	1.84	Rating **	М	Issue No.	151 (cont)
LM End	1.84	Issue Type +	En	Location *	



8-inch steel pipe with vent/siphon breaker on LS shoulder. Pipe sleeved through 14-inch steel pipe. Electrical conduit visible next to pipe.

#### Photo 3 of 3: UCIP\_SP\_2019\_47516\_75034.jpg



LS: (photo from FPIIB Inspector H. Phillips) Annular space not grouted.

Location LS: Land Side N/A: Not Applicable WS: Water Side

Rating : Acceptable Minimally Acceptable U: Unacceptable

N: Not Inspected/Rated C: Corrected

Issue Type Ma: Maintenance Deficiency Ob : Design & System Obsolescence

En: Enforcement

# Levee Inspection Report By Mile - Spring 2019

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Steamboat Slough	Right	6.71	03/12/2019 03/12/2019	David Julian

LM Start	2.07	Rating **	U	Issue No.		47			
LM End	2.07	Issue Type +	Ma	Location *	WS				
Category	Earthen Levee						GPS La	tituc	le/Longitude
Calegory				Start		End			
Item	Slope Sta	bility		38.22507	70°	38.225070 °			
item		-121.60382	27 °	-121.603827 °					
DWR ID	VR ID DWR_RD0501_01_f _ 2018_47								

#### Comment Code

S2 : Repair the levee slope damaged by foot traffic and prevent access where possible.

#### Inspector Comment

Deep gouges in the waterside slope due to heavy foot traffic. LMA put sign up to deter foot traffic and it has been effective.

LM Start	2.07	Rating **	U	Issue No.	47 (cont)
LM End	2.07	Issue Type +	Ma	Location *	WS

# Photo 1 of 2 : SP\_2019\_RD0501\_169\_47\_20190311\_00013.jpg



View of foot path that is more than 1 foot deep into the waterside slope (November 2018).

Photo 2 of 2: SP\_2019\_RD0501\_169\_47\_20190311\_00014.jpg



View of two additional foot paths that are more than 1 foot deep into the waterside slope (November 2018).

LM Start	2.24	Rating **	U	Issue No.		48	
LM End	2.24	Issue Type +	Ма	Location *		LS	
Category	Earthen Levee			GPS Latitude/Longitude			
Category	ategory			Start		End	
Item	Trim / Thi	n Trees		38.2225	98°	38.222598	0
Item				-121.6033	30°	-121.603330	0
DWR ID DWR_RD0501_01_f _ 2018_48							
		Comn	nent Coc	le			

T2: Thin trees to allow visibility of the ground and room to flood fight.

Inspector Comment

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS : Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement

# **Levee Inspection Report By Mile - Spring 2019**

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Steamboat Slough	Right	6.71	03/12/2019 03/12/2019	David Julian

	0.07	Dating **		Issue No.		40		
LM Start	2.27	Rating **	М	issue ivo.		49		
LM End	2.27	Issue Type +	En	Location *	LS			
Category	Earthen Levee			GPS L	atitud	le/Longitude		
Odlogory			Start		End			
Item	Encroach	ments		38.222152 °		38.222152 °		
пеш	iliciii			-121.603325 °		-121.603325°		
DWR ID DWR_RD0501_01_f _ 2018_49								
		Comn	nent Cod	de				
EQ : Equip	ment							
		Inspecto	or Comm	nent				



View of ornamental farm equipment on the landside shoulder (November 2018).

LM Start	2.32	Rating **	U	Issue No.	50		
LM End	2.32	Issue Type +	En	Location *	LS		
Category	Earthen Levee			GPS La	atitud	e/Longitude	
Category			Start		End		
Item	Vegetatio	n		38.2214	88°	38.221488 °	
item			-121.603423 °		° -121.603423 °		
DWR ID DWR_RD0501_01_f _ 2018_50							
		Comn	nent Cod	le			
V6 : Lands	caping						
		Inspecto	or Comm	nent			

### Levee Inspection Report By Mile - Spring 2019

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Steamboat Slough	Right	6.71	03/12/2019 03/12/2019	David Julian

LM Start	2.34 Rating **		М	Issue No.		152
LM End	2.34	Issue Type +	En	Location *		
Supplemental			GPS Latitude/Longitude			
Calegory		Start		End		
Item	DWR UC	IP Field Study		38.2212	77 °	38.221277
пеш				-121.6035	05 °	-121.603505 °
DWR ID	21021					

#### Comment Code

#### Inspector Comment

FS\_ID:44683 DS\_ID:21021 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Appears abandoned and if so should be done so properly. Discarded pipe on WS slope should be removed.

FIELD\_STRUCT\_DESC: 10-inch steel irrigation discharge pipe through the levee, 2.5 feet below the crown. Pump and gate valve in a pump house on the waterside (WS) slope. 4-foot by 4-foot concrete distribution box, power pole, and meter at the landside (LS) toe. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento

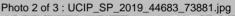
O&M Manual 105, April 1959, (HLM 2.5)].

FS Date: 4/21/2015

LM Start	2.34	Rating **	М	Issue No.	152 (cont)
LM End	2.34	Issue Type +	En	Location *	



Pipe visible on LS slope.





Pipe and pumphouse on WS slope.

# Levee Inspection Report By Mile - Spring 2019

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Steamboat Slough	Right	6.71	03/12/2019 03/12/2019	David Julian

LM Start	2.34	Rating **	М	Issue No.	152 (cont)	
LM End	2.34	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS La	titud	e/Longitude
Calegory				Start		End
Item	DWR UC	IP Field Study		38.2212	77°	38.221277 °
Item				-121.6035	05 °	-121.603505 °
DWR ID	21021					

#### Comment Code

#### Inspector Comment

FS\_ID:44683 DS\_ID:21021 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Appears abandoned and if so should be done so properly. Discarded pipe on WS slope should be removed.

FIELD\_STRUCT\_DESC: 10-inch steel irrigation discharge pipe through the levee, 2.5 feet below the crown. Pump and gate valve in a pump house on the waterside (WS) slope. 4-foot by 4-foot concrete distribution box, power pole, and meter at the landside (LS) toe. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento

O&M Manual 105, April 1959, (HLM 2.5)].

FS Date: 4/21/2015



Pipe, conduit, and pipe debris on WS slope.

	LM Start	2.41	Rating ""	M	issue No.		51		
	LM End	2.41	Issue Type +	Ma	Location *	LS			
	Category	Earthen L	evee	GPS Latitude/Longitude					
					Start		End		
	Item	Trim / Thi	Trim / Thin Trees			23 °	38.220323	0	
					-121.6039	37°	-121.603937	0	
	DWR ID	DWR_RD0	501_01_f _ 201	8_51					
	Comment Code								

T2: Thin trees to allow visibility of the ground and room to flood fight.

Inspector Comment

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS : Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

### Levee Inspection Report By Mile - Spring 2019

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Steamboat Slough	Right	6.71	03/12/2019 03/12/2019	David Julian

LM Start	2.57	Rating **	М	Issue No.	32		
LM End	2.60	Issue Type +	Ма	Location *	LS		
Category Earthen Levee			GPS Latitude/Longitude				
Calegory		Start		End			
	Item Trim / Thin Trees			38.21817	B°	38.217875	0
пеш				-121.60529	3°	-121.605532	0
DWR ID	DWR_RD0	501_01_s _ 201	2_32				

Comment Code

T1: Trim trees to at least five feet above ground level.

Inspector Comment

Continue trimming the trees at this location to at least five feet above the ground.

No Photos

Rating \*\* Issue No. LM Start 2.67 34 Issue Type + Location \* LS LM End 2.73 Ma Earthen Levee GPS Latitude/Longitude Category Trim / Thin Trees 38.217030° 38.216408° Item -121.606303° -121.607057 ° DWR ID DWR RD0501 01 s 2012 34

Comment Code

T1: Trim trees to at least five feet above ground level.

Inspector Comment

Trim the trees to at least five feet above the ground.

No Photos

LM Start	2.80 Rating ** M		Issue No.		65		
LM End	2.80	Issue Type +	En	Location *	LS		
Category	Earthen L	evee		GPS La	titud	e/Longitude	
Category			Start		End		
Item	Encroachments			38.21559	92 °	38.215592	0
item				-121.60779	98°	-121.607798	0
DWR ID	DWR_RD0	501_01_s _ 201	9_65				

Comment Code

FW : Firewood

Inspector Comment

Remove firewood logs from landside shoulder.



View of firewood logs on the landside shoulder (Spring 2019).

\* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiency

M: Monitor & Maintenance Deficiency

C: Corrected Ob: Design & System Obsolescence

En: Enforcement

\* Issue Type

Ma: Maintenance Deficiency

Ob: Design & System Obsolescence

En: Enforcement

### **Levee Inspection Report By Mile - Spring 2019**

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Steamboat Slough	Right	6.71	03/12/2019 03/12/2019	David Julian

LM Start	2.82	Rating **	М	Issue No.	153			
LM End	2.82	Issue Type +	En	Location *				
Category	Suppleme	ental	GPS La	atitud	le/Longitude			
Calegory				Start		End		
Item	DWR UC	IP Field Study		38.2153	51 °	38.215351 °		
пеш				-121.6080	13 °	-121.608013 °		
DWR ID	21022							
	Comment Code							

# Inspector Comment

FS ID:32526 DS\_ID:21022 EP NO: 2742

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) through the levee slopes. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Additional notes: pump was running during inspection, 16-inch pipe debris section located on landward side, view of standpipe and support structure on waterward side does not match structure description--need to determine if crossing has been altered.

FIELD\_STRUCT\_DESC: 16-inch coated steel drainage discharge pipe through the levee, 3.6 feet below the crown. Cutoff walls around the pipe at the center of the levee. Siphon breaker on the apex of the pipe on the landside (LS) shoulder. Pump house on the LS shoulder. Pipe discharges into a 48-inch pipe with a screw gate on the LS. Rock revetment placed on the waterside (WS) slope. Revegetation in progress on the WS. (Plans to install a 16-inch siphon through the levee authorized under Permit No. 2742, 1958 - Reclamation District No. 501 [RD0501]. Plans to replace a portion of an existing 16-inch discharge pipe through the levee authorized under Permit No. 15380, 1999 RD0501). [Additional Reference(s): DWR Levee Log, 2005].

FS Date: 6/4/2013

LM Start	2.82	Rating **	М	Issue No.	153 (cont)
LM End	2.82	Issue Type +	En	Location *	

# Photo 1 of 3: UCIP\_SP\_2019\_32526\_58933.jpg



Overview of crown at crossing, looking downstream.

#### Photo 2 of 3: UCIP SP 2019 32526 58935.jpg



Pump house on landward slope. An abandoned pipe section on landward slope.

# Levee Inspection Report By Mile - Spring 2019

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Steamboat Slough	Right	6.71	03/12/2019 03/12/2019	David Julian

LM Start	2.82	2.82 Rating **		Issue No.		153 (cont)
LM End	2.82	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS La	titud	e/Longitude
Calegory				Start		End
Item	DWR UC	IP Field Study		38.2153	51 °	38.215351 °
пеш				-121.6080°	ı3°	-121.608013 °
DWR ID	21022					

#### Comment Code

#### Inspector Comment

FS\_ID:32526 DS\_ID:21022 EP\_NO: 2742

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) through the levee slopes. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Additional notes: pump was running during inspection, 16-inch pipe debris section located on landward side, view of standpipe and support structure on waterward side does not match structure description--need to determine if crossing has been altered.

FIELD\_STRUCT\_DESC: 16-inch coated steel drainage discharge pipe through the levee, 3.6 feet below the crown. Cutoff walls around the pipe at the center of the levee. Siphon breaker on the apex of the pipe on the landside (LS) shoulder. Pump house on the LS shoulder. Pipe discharges into a 48-inch pipe with a screw gate on the LS. Rock revetment placed on the waterside (WS) slope. Revegetation in progress on the WS. (Plans to install a 16-inch siphon through the levee authorized under Permit No. 2742, 1958 - Reclamation District No. 501 [RD0501]. Plans to replace a portion of an existing 16-inch discharge pipe through the levee authorized under Permit No. 15380, 1999 - RD0501). [Additional Reference(s): DWR Levee Log, 2005]. FS Date: 6/4/2013



Standpipe on landward toe.

	LM Start	2.83	Rating **	M	Issue No.		52	
	LM End	2.89	Issue Type +	Ма	Location *	LS		
	Category	Earthen L	GPS Latitude/Longitude					
					Start		End	
	Item	Trim / Thi	n Trees		38.2152	55 °	38.214455	0
					-121.6081	58°	-121.608783	0
	DWR ID	DWR_RD0	501_01_f _ 201	8_52				

Comment Code
T2: Thin trees to allow visibility of the ground and room to flood fight.

Inspector Comment

* L	ocation		** Rating		+ Issue Type
1	S: Land Side N/A:	Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
V	/S : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
	CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

### **Levee Inspection Report By Mile - Spring 2019**

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Steamboat Slough	Right	6.71	03/12/2019 03/12/2019	David Julian

LM Start	2.91	Rating **	M	Issue No.		37		
LM End	2.97	Issue Type +	En	Location *		LS		
Category	Earthen L		GPS La	atitud	e/Longitude			
Calegory				Start		End		
Item	Vegetatio	Vegetation			35 °	38.213547°		
пеш			-121.608993 °		° -121.609527°			
DWR ID	DWR_RD0	501_01_s _ 201	2_37			·		
		Comn	nent Cod	le				
V6 : Lands	caping							
	Inspector Comment							

No Photos

LM Start	<b>2.97</b> Rating ** M		Issue No.		154	
LM End	2.97	2.97 Issue Type + En I		Location *		
Category	Suppleme	ental		GPS La	atitud	e/Longitude
Calegory				Start		End
Item	DWR UCI	IP Field Study		38.2134	39°	38.213439°
iteiii				-121.6095	83 °	-121.609583°
DWR ID	21025					

# Comment Code

#### Inspector Comment

FS\_ID:44688 DS ID:21025 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pipe appears abandoned and if so should be done so

FIELD\_STRUCT\_DESC: 2-inch galvanized iron gravity irrigation pipe through the levee, 3.2 feet below the crown. 6-foot-diameter steel standpipe at the landside (LS) toe. Pipe may run parallel to the levee crown to cross the levee at the site of the 14-inch pipe at HLM 2.98.

[Additional Reference(s): DWR Levee Log, 2005].

FS Date: 4/21/2015

# Photo 1 of 2: UCIP\_SP\_2019\_44688\_73891.jpg



Pipe visible at LS shoulder. Pipe connects to top of steel standpipe at

# Levee Inspection Report By Mile - Spring 2019

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Steamboat Slough	Right	6.71	03/12/2019 03/12/2019	David Julian

LM Start	2.97	Rating **	М	Issue No.		154 (cont)	
LM End	2.97	Issue Type +	En	Location *			
Category	Suppleme	ental		GPS Lati	tud	e/Longitude	
Calegory				Start		End	
Item	DWR UC	IP Field Study		38.213439	°	38.213439	0
пеш				-121.609583	3°	-121.609583	0
DWR ID	21025						

# Comment Code

#### Inspector Comment

FS\_ID:44688 DS\_ID:21025 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pipe appears abandoned and if so should be done so

properly.

FIELD\_STRUCT\_DESC: 2-inch galvanized iron gravity irrigation pipe through the levee, 3.2 feet below the crown. 6-foot-diameter steel standpipe at the landside (LS) toe. Pipe may run parallel to the levee crown to cross the levee at the site of the 14-inch pipe at HLM 2.98.

[Additional Reference(s): DWR Levee Log, 2005].

FS Date: 4/21/2015



Shutoff valve at LS shoulder.

LM Start	3.02	Rating **	M	Issue No.		53			
LM End	3.02	Issue Type +	Ма	Location *		LS			
Category	Earthen L	_evee		Earthen Levee		GPS La	atitud	e/Longitude	
Calegory						End			
Item	Trim / Thin Trees			38.2128	03°	38.212803	0		
item				-121.6099	22 °	-121.609922	0		
DWR ID	DWR_RD0	501_01_f _ 201	8_53						
Comment Code									
							-		

T2: Thin trees to allow visibility of the ground and room to flood fight.

Inspector Comment

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

# **Levee Inspection Report By Mile - Spring 2019**

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Steamboat Slough	Right	6.71	03/12/2019 03/12/2019	David Julian

LM Start	3.07	Rating **	M	Issue No.		54				
LM End	3.17	Issue Type +	Ма	Location *		LS				
Category	Earthen L	evee		GPS La	atitud	le/Longitude				
Category				Start		End				
Item	Trim / Thi	n Trees		38.2120	72 °	38.210642 °				
item				-121.6100	97 °	-121.610397 °				
DWR ID	DWR_RD0	501_01_f _ 201	8_54							
		Comn	nent Cod	le						
T2 : Thin to	rees to allo	w visibility of	the grou	nd and roo	m to	flood fight.				
		Inspecto	or Comm	nent						

# Levee Inspection Report By Mile - Spring 2019

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Steamboat Slough	Right	6.71	03/12/2019 03/12/2019	David Julian

LM Start	3.12	Rating **	U	Issue No.		155		
LM End	3.12	Issue Type +	En	Location *				
Category	Supplemental					e/Longitude		
Calegory				Start		End		
Item	DWR UC	IP Field Study		38.2113	86°	38.211386	٥	
пеш				-121.6101	89°	-121.610189	٥	
DWR ID	21026							

# Comment Code

#### Inspector Comment

FS\_ID:53351 DS\_ID:21026 EP\_NO: 9880 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 07/24/2018 Pump not on during time of inspection, so could not identify any leaks on WS. Both LS and WS appear in good condition, but keeping Urgent due to concerns from crack on crown and recommend internal pipe inspection or seal test, as last inspector (D. Sanoski - DWR UCIP).8/22/2016 Same as last inspection (pipe appears to be leaking on WS). UPDATES--levee crown has been repaved by Sacramento County--no cracks found on crown surface. Dense vegetation limits the inpsector's visibility to identify signs of pipe failure (leaks) through the slope. Need to contact owner to determine status of crossing. Due to the leak on the WS it is recommended that the pipe be tested for internal integrity through the levee. (DWR UCIP omagana)6/04/2013 Damage present to pipe (leak). Additional notes available: 8-inch is leaking on landward side--white sealant and rag used to seal hole, single line crack on the crown of the alignment, pipe through the levee could be bigger than 8-inch unable to confirm. Also found a 3-inch steel pipe approximately 7 feet upstream from 8-inch pipe (authorized or unauthorize?). Need to contact owner to coordinate with CVFPB. (DWR UCIP - omagana)

FIELD\_STRUCT\_DESC: 8-inch coated steel irrigation discharge pipe and 1.5-inch steel electrical conduit through the levee, both 2 feet below the crown. Gate valve on the waterside (WS). Cutoff wall around the pipe and conduit at the center of the levee. Siphon breaker on the apex of the pipe at the landside (LS) shoulder. Pump on a piling structure on the WS slope. Meter pole on the LS toe. Pipe is exposed along the LS slope. Discharge filter on the LS slope. (Pipe and pump installed under Permit No. 9880, 1974 - Stewart Brothers. Permit conditions modified under Permit Nos. 9880-A and 9880-B, 1975 - Stewart Brothers). [Additional Reference(s): DWR Levee Log, 2005].

FS Date: 7/24/2018 3:23:00 PM



View of levee crown at crossing. Single line crack on levee crown.

### Levee Inspection Report By Mile - Spring 2019

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Steamboat Slough	Right	6.71	03/12/2019 03/12/2019	David Julian

LM Start	3.12	Rating **	U	Issue No.		155 (cont)			
LM End	3.12	Issue Type +	En	Location *					
Category	Suppleme	ental	GPS La	titud	e/Longitude				
Calegory				Start		End			
Item	DWR UC	IP Field Study		38.21138	86 °	38.211386 °			
пеш				-121.61018	89°	-121.610189 °			
DWR ID	WR ID 21026								

# Comment Code

#### Inspector Comment

FS\_ID:53351 DS\_ID:21026 EP\_NO: 9880 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 07/24/2018 Pump not on during time of inspection, so could not identify any leaks on WS. Both LS and WS appear in good condition, but keeping Urgent due to concerns from crack on crown and recommend internal pipe inspection or seal test, as last inspector (D. Sanoski - DWR UCIP).8/22/2016 Same as last inspection (pipe appears to be leaking on WS). UPDATES--levee crown has been repaved by Sacramento County--no cracks found on crown surface. Dense vegetation limits the inpsector's visibility to identify signs of pipe failure (leaks) through the slope. Need to contact owner to determine status of crossing. Due to the leak on the WS it is recommended that the pipe be tested for internal integrity through the levee. (DWR UCIP omagana)6/04/2013 Damage present to pipe (leak). Additional notes available: 8-inch is leaking on landward side--white sealant and rag used to seal hole, single line crack on the crown of the alignment, pipe through the levee could be bigger than 8-inch unable to confirm. Also found a 3-inch steel pipe approximately 7 feet upstream from 8-inch pipe (authorized or unauthorize?). Need to contact owner to coordinate with CVFPB. (DWR UCIP - omagana)

FIELD\_STRUCT\_DESC: 8-inch coated steel irrigation discharge pipe and 1.5-inch steel electrical conduit through the levee, both 2 feet below the crown. Gate valve on the waterside (WS). Cutoff wall around the pipe and conduit at the center of the levee. Siphon breaker on the apex of the pipe at the landside (LS) shoulder. Pump on a piling structure on the WS slope. Meter pole on the LS toe. Pipe is exposed along the LS slope. Discharge filter on the LS slope. (Pipe and pump installed under Permit No. 9880, 1974 - Stewart Brothers. Permit conditions modified under Permit Nos. 9880-A and 9880-B, 1975 - Stewart Brothers). [Additional Reference(s): DWR Levee Log, 2005].

FS Date: 7/24/2018 3:23:00 PM

### Photo 2 of 3: UCIP\_SP\_2019\_53351\_58940.jpg



Station details--gate valve, air vent, and other appurtenances.

### Levee Inspection Report By Mile - Spring 2019

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Steamboat Slough	Right	6.71	03/12/2019 03/12/2019	David Julian

LM Start	3.12	Rating **	U	Issue No.	155 (cont)				
LM End	3.12	Issue Type +	En	Location *					
Category	Suppleme	ental	GPS La	tituc	le/Longitude				
Calegory	Category					End			
Item	DWR UC	P Field Study		38.2113	86°	38.211386°			
пеш				-121.6101	89°	-121.610189°			
DWR ID	DWR ID 21026								
	Comment Code								

#### Inspector Comment

FS\_ID:53351 DS\_ID:21026 EP\_NO: 9880 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 07/24/2018 Pump not on during time of inspection, so could not identify any leaks on WS. Both LS and WS appear in good condition, but keeping Urgent due to concerns from crack on crown and recommend internal pipe inspection or seal test, as last inspector (D. Sanoski - DWR UCIP).8/22/2016 Same as last inspection (pipe appears to be leaking on WS). UPDATES--levee crown has been repaved by Sacramento County--no cracks found on crown surface. Dense vegetation limits the inpsector's visibility to identify signs of pipe failure (leaks) through the slope. Need to contact owner to determine status of crossing. Due to the leak on the WS it is recommended that the pipe be tested for internal integrity through the levee. (DWR UCIP omagana)6/04/2013 Damage present to pipe (leak). Additional notes available: 8-inch is leaking on landward side--white sealant and rag used to seal hole, single line crack on the crown of the alignment, pipe through the levee could be bigger than 8-inch unable to confirm. Also found a 3-inch steel pipe approximately 7 feet upstream from 8-inch pipe (authorized or unauthorize?). Need to contact owner to coordinate with CVFPB. (DWR UCIP - omagana)

FIELD\_STRUCT\_DESC: 8-inch coated steel irrigation discharge pipe and 1.5-inch steel electrical conduit through the levee, both 2 feet below the crown. Gate valve on the waterside (WS). Cutoff wall around the pipe and conduit at the center of the levee. Siphon breaker on the apex of the pipe at the landside (LS) shoulder. Pump on a piling structure on the WS slope. Meter pole on the LS toe. Pipe is exposed along the LS slope. Discharge filter on the LS slope. (Pipe and pump installed under Permit No. 9880, 1974 - Stewart Brothers. Permit conditions modified under Permit Nos. 9880-A and 9880-B, 1975 - Stewart Brothers). [Additional Reference(s): DWR Levee Log, 2005].

FS Date: 7/24/2018 3:23:00 PM

### Photo 3 of 3: UCIP\_SP\_2019\_53351\_58945.jpg



View of waterward side--pressure gauge, conduit, and wraps to prevent leaks

# Levee Inspection Report By Mile - Spring 2019

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Steamboat Slough	Right	6.71	03/12/2019 03/12/2019	David Julian

LM Start	3.19	Rating **	U	Issue No.		15	
LM End	3.22	Issue Type +	En	Location *		LS	
Category	Earthen Levee					le/Longitude	
Calegory				Start		End	
Item	Vegetatio	n		38.21042	29°	38.209974 °	
пеш				-121.61050	)3 °	-121.610703 °	
DWR ID	/R ID DWR_RD0501_01_s _ 2012_15						

#### Comment Code

V6: Landscaping

#### Inspector Comment

Large cactus and other landscaping should be thinned or removed to allow inspection and access to landside slope and toe.

# Photo 1 of 1 : SP\_2019\_RD0501\_169\_15\_20190311\_00001.jpg



View of cactus on levee slope.

LM Start	3.24	Rating **	U	Issue No.	63		
LM End	3.24	Issue Type +	En	Location *	LS		
Category	Earthen Levee			GPS Latitude/Longitude			
Calegory			Start		End		
Item	Encroachments			38.2098	11 °	38.209713 °	
item				-121.610813 °		-121.610882°	
DWR ID	DWR RD0	501 01 f 201	2 63				

#### Comment Code

MA: Material

#### Inspector Comment

There is a large stock pile of fire wood, metal scrap, and other unwanted materials placed witihn the 10-foot easement landside that need to be removed.

LM Start	3.24	Rating **	U	Issue No.	63 (cont)	
LM End	3.24	Issue Type +	En	Location *	LS	

#### Photo 1 of 2: SP\_2019\_RD0501\_169\_63\_20190311\_00017.jpg



RD 501 Unit 1 levee mile 3.24 landside toe.

Photo 2 of 2 : SP\_2019\_RD0501\_169\_63\_20190311\_00018.jpg



RD 501 Levee mile 3.24 landside toe.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

### Levee Inspection Report By Mile - Spring 2019

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Steamboat Slough	Right	6.71	03/12/2019 03/12/2019	David Julian

LM Start	3.26	Rating **	М	Issue No.	55		
LM End	3.29	Issue Type +	Ma	Location *	LS		
Category	GPS Latitude/Longitude						
Calegory		Start		End			
Item	Trim / Thin Trees			38.209402°		38.209013	٥
пеш		-121.610900 °		° -121.611078 °			
DWR ID DWR_RD0501_01_f _ 2018_55							
Comment Code							
T2: Thin trees to allow visibility of the ground and room to flood fight.							
Inspector Comment							

No Photos

LM Start	3.46	Rating **	М	Issue No.		156	
LM End	3.46	Issue Type +	En	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory		Start		End			
Item	DWR UC	IP Field Study		38.20672	26°	38.206726°	
пеш			-121.61213	35 °	-121.612135°		
DWR ID	21028						

#### Comment Code

#### Inspector Comment

FS\_ID:32529 DS\_ID:21028 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pipe was running during inspection. Crack on crown surface could be associated with pipe vibration during operation. Need to determine owner of crossing. Owner will need to clear vegetation along pipe alignment on landward side to prevent levee inspection along crossing.

FIELD\_STRUCT\_DESC: 20-inch irrigation discharge pipe of an unknown material through the levee, 2.2 feet below the crown. 1.5-inch electrical conduit alongside the 20-inch pipe. Pump on a platform on the waterside (WS). Walkway present on the WS. Standpipe on the landside (LS) toe. Pipe exposed along both slopes. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959, (HLM 3.7)].

FS Date: 6/4/2013



Single line crack on crown.

# Levee Inspection Report By Mile - Spring 2019

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Steamboat Slough	Right	6.71	03/12/2019 03/12/2019	David Julian

LM Start	3.46	Rating **	М	Issue No.		156 (cont)
LM End	3.46	Issue Type +	En	Location *		
Category Supplemental				GPS Latitude/Longitude		
Calegory		Start		End		
Item	DWR UC	IP Field Study		38.20672	6°	38.206726 °
пеш				-121.61213	5 °	-121.612135 °
DWR ID	21028					

#### Comment Code

#### Inspector Comment

FS\_ID:32529 DS\_ID:21028 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pipe was running during inspection. Crack on crown surface could be associated with pipe vibration during operation. Need to determine owner of crossing. Owner will need to clear vegetation along pipe alignment on landward side to prevent levee inspection along crossing.

FIELD\_STRUCT\_DESC: 20-inch irrigation discharge pipe of an unknown material through the levee, 2.2 feet below the crown. 1.5-inch electrical conduit alongside the 20-inch pipe. Pump on a platform on the waterside (WS). Walkway present on the WS. Standpipe on the landside (LS) toe. Pipe exposed along both slopes. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959, (HLM 3.7)].

FS Date: 6/4/2013

LM Start	3.46	Rating **	М	Issue No.	156 (cont)
LM End	3.46	Issue Type +	En	Location *	

#### Photo 2 of 3: UCIP\_SP\_2019\_32529\_58951.jpg



View of waterward side--siphon breaker, walkway, platform, pump, and control panel.

#### Photo 3 of 3: UCIP\_SP\_2019\_32529\_58952.jpg



20-inch steel pipe along with 1.5-inch electrical conduit on landward side.

# **Levee Inspection Report By Mile - Spring 2019**

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Steamboat Slough	Right	6.71	03/12/2019 03/12/2019	David Julian

LM Start	3.48	Rating **	U	Issue No.		56			
LM End	3.48	Issue Type +	Ма	Location *	LS				
Category Earthen Levee			GPS Latitude/Longitude						
Category				Start		End			
Item	Trim / Thi	n Trees		38.2063	75 °	38.206375 °			
пеш				-121.6122	58 °	-121.612258 °			
DWR ID	DWR ID DWR_RD0501_01_f _ 2018_56								
Comment Code									
TO Th's (			d			Clarate Carlot			

T2: Thin trees to allow visibility of the ground and room to flood fight.

Inspector Comment

No Photos

LM Start	3.59	Rating **	М	Issue No.		60				
LM End	3.64	Issue Type +	Ma	Location *	LS					
Category	Earthen Levee								titud	e/Longitude
Calegory				Start		End				
Item	Trim / Thi	n Trees		38.2049	52 °	38.204242 °				
пеш				-121.61283	35 °	-121.613082 °				
DWR ID	DWR_RD0	501_01_f _ 201	8_60							
		_	_							

Comment Code

T2: Thin trees to allow visibility of the ground and room to flood fight.

Inspector Comment

No Photos

LM Start	3.68	Rating **	М	Issue No.		Issue No.		61	
LM End	3.68	Issue Type +	En	Location *	LS				
Catagony	Category Earthen Levee				itud	e/Longitude			
Calegory						End			
Item	Encroach	ments		38.20359	5°	38.203595	0		
item			-121.61325	3°	-121.613253	0			
DWR ID	DWR_RD0	501_01_f _ 201	8_61						

Comment Code

TR : Tree or limb

Inspector Comment

Remove downed tree from landside toe.



View of downed tree on the landside toe (November 2018).

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Spring 2019

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Steamboat Slough	Right	6.71	03/12/2019 03/12/2019	David Julian

LM Start	3.74	Rating **	М	Issue No.		Issue No.		30
LM End	3.74	Issue Type +	En	Location *		LS		
Cotogon Earthen Levee				GPS Latitude/Longitude				
Category				Start		End		
Item	Vegetatio	n		38.20286	3°	38.202863 °		
item				-121.61350	8 °	-121.613508 °		
DWR ID DWR_RD0501_01_f _ 2017_30								

Comment Code

V6: Landscaping

#### Inspector Comment

Landscaping should be thinned to allow inspection and access to slope and toe. Downed deadwood should also be removed from slope.



View of landscaping on slope and toe.

LM Start	3.94	Rating **	М	Issue No.		33
LM End	4.00	Issue Type +	Ma	Location *		LS
Category Earthen Levee				GPS La	titud	e/Longitude
Category						End
Item	Trim / Thi	n Trees		38.2000	83 °	38.199278°
пеш		•		-121.6146	42 °	-121.615070 °
DWR ID	DWR_RD0	501_01_f _ 201	7_33			

Comment Code

T2: Thin trees to allow visibility of the ground and room to flood fight.

#### Inspector Comment

Remove this vegetation to increase visibility and access to slope and toe.

No Photos

# Levee Inspection Report By Mile - Spring 2019

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Steamboat Slough	Right	6.71	03/12/2019 03/12/2019	David Julian

LM Start	4.27	Rating **	М	Issue No.		157		
LM End	4.27	Issue Type +	En	Location *				
Category	Supplemental					GPS Latitude/Longitude		
Calegory				Start		End		
Item	DWR UC	IP Field Study		38.19617	S °	38.196176	0	
пеш		-121.617898	3°	-121.617898	0			
DWR ID	21016							

# Inspector Comment

Comment Code

FS\_ID:19644 DS\_ID:21016 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

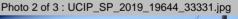
UCIP Comments: Pipe section was altered/modified through levee crown. 12-inch pipe sleeved through existing pipe. Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) through the slope. Additional Notes: electrical conduit is disconnected on landside. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Also need to contact owner to obtain maintenance records for crossing--need permit authorizing modifications.

FIELD\_STRUCT\_DESC: 14-inch irrigation discharge pipe of an unknown material through the levee, 3.2 feet below the crown. 12-inch pipe sleeved through the existing 14-inch pipe with annular space grouted. 1.5-inch electrical conduit runs parallel along the 14-inch pipe. Pump on a pile structure in the channel. Walkway to the pump. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959, (HLM 4.6), 14-inch pipe listed]. FS Date: 6/4/2013

LM Start	4.27	Rating **	М	Issue No.	157 (cont)
LM End	4.27	Issue Type +	Fn	Location *	



View of waterward side.





Overview of waterward side--pump station, platform, & power pole.

# **Levee Inspection Report By Mile - Spring 2019**

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Steamboat Slough	Right	6.71	03/12/2019 03/12/2019	David Julian

LM Start	4.27	Rating **	М	Issue No.		157 (cont)
LM End	4.27	Issue Type +	En	Location *		
Category	Suppleme	ental	GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR UC	IP Field Study		38.19617	76 °	38.196176 °
пеш			-121.61789	98°	-121.617898 °	
DWR ID	21016					

#### Comment Code

#### Inspector Comment

FS\_ID:19644 DS\_ID:21016 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pipe section was altered/modified through levee crown. 12-inch pipe sleeved through existing pipe. Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) through the slope. Additional Notes: electrical conduit is disconnected on landside. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Also need to contact owner to obtain maintenance records for crossing--need permit authorizing modifications.

FIELD\_STRUCT\_DESC: 14-inch irrigation discharge pipe of an unknown material through the levee, 3.2 feet below the crown. 12-inch pipe sleeved through the existing 14-inch pipe with annular space grouted. 1.5-inch electrical conduit runs parallel along the 14-inch pipe. Pump on a pile structure in the channel. Walkway to the pump. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959, (HLM 4.6), 14-inch pipe listed]. FS Date: 6/4/2013

# Photo 3 of 3: UCIP\_SP\_2019\_19644\_33326.jpg



12-inch pipe sleeved through existing 14-inch pipe, and annular space grouted--waterward side.

LM Start	4.29	Rating **	М	Issue No.		66	
LM End	4.41	Issue Type +	En	Location *	LS		
Category	evee	GPS Latitude/Longitude					
Category				Start		End	
Item	Encroach	ments		38.1959	73 °	38.195167°	
пеш				-121.6182	75 °	-121.620215 °	
DWR ID DWR_RD0501_01_s _ 2019_66							
Comment Code							

DT : Ditch

#### Inspector Comment

A ditch is located at the levee toe.

# Photo 1 of 2: SP\_2019\_RD0501\_169\_66\_20190314\_00071.jpg



View looking upstream at ditch on the landside toe (Spring 2019).

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

# **Levee Inspection Report By Mile - Spring 2019**

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Steamboat Slough	Right	6.71	03/12/2019 03/12/2019	David Julian

LM Start	4.29	Rating **	М	Issue No.		66 (cont)		
LM End	4.41	Issue Type +	En	Location *		LS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	Encroach	ments		38.1959	73 °	38.195167°		
пеш			-121.6182	75 °	-121.620215 °			
DWR ID	DWR_RD0	501_01_s _ 201	9_66					
		Comn	nent Cod	le				
DT : Ditch								
Inspector Comment								
A ditch is located at the levee toe.								



View looking downstream at ditch on the landside toe (Spring 2019).

LM Start	4.34	Rating **	M	Issue No.		158
LM End	4.34	Issue Type +	En	Location *		
Category	ental	GPS Latitude/Longitude				
Calegory				Start		End
Item	DWR UC	IP Field Study		38.1956	27°	38.195627°
пеш				-121.6190	32 °	-121.619082°
DWR ID	21017					

# Comment Code

#### Inspector Comment

FS\_ID:50024 DS\_ID:21017 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 8/22/2016 Unable to locate conduit due to dense vegetation. Electrical conduit crossing has been downgraded from Urgent to Non-Urgent no damage to levee was observed. Dense vegetation was observed on both WS and LS. Recomend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. If crossing is abandoned owner will need to coordinate with CVFPB to remove crossing. (DWR UCIP omagana)4/21/2016 Pipe abandoned and open on WS slope. Should be removed or abandoned properly. (DWR UCIP - omagana) FIELD\_STRUCT\_DESC: \*ABANDONED\* 2.5-inch steel electrical conduit through the levee, 4 feet below the crown. No Location marker was found on the waterside (WS) slope. [Additional Reference(s): DWR Levee Log, 20051. FS Date: 8/22/2016

# Photo 1 of 3: UCIP\_SP\_2019\_50024\_73901.jpg



2.5-inch conduit visible on WS slope.

# Levee Inspection Report By Mile - Spring 2019

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Steamboat Slough	Right	6.71	03/12/2019 03/12/2019	David Julian

LM Start	4.34	Rating **	М	Issue No.		158 (cont)
LM End	4.34	Issue Type +	En	Location *		
Category	ental	GPS Latitude/Longitude				
Calegory				Start		End
Item	DWR UC	IP Field Study		38.19562	27°	38.195627°
пеш			-121.61908	32 °	-121.619082 °	
DWR ID	21017					

## Comment Code

#### Inspector Comment

FS\_ID:50024 DS\_ID:21017 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 8/22/2016 Unable to locate conduit due to dense vegetation. Electrical conduit crossing has been downgraded from Urgent to Non-Urgent no damage to levee was observed. Dense vegetation was observed on both WS and LS. Recomend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. If crossing is abandoned owner will need to coordinate with CVFPB to remove crossing. (DWR UCIP - omagana)4/21/2016 Pipe abandoned and open on WS slope. Should be removed or abandoned properly. (DWR UCIP - omagana) FIELD\_STRUCT\_DESC: \*ABANDONED\* 2.5-inch steel electrical conduit through the levee, 4 feet below the crown. No Location marker was found on the waterside (WS) slope. [Additional Reference(s): DWR Levee Log, 2005].

LM Start	4.34	Rating **	М	Issue No.	158 (cont)
LM End	4.34	Issue Type +	En	Location *	

# Photo 2 of 3: UCIP\_SP\_2019\_50024\_73900.jpg



2.5-inch conduit visible on WS slope.

#### Photo 3 of 3: UCIP\_SP\_2019\_50024\_75655.jpg



Dense vegetation on WS--unable to locate line.

# **Levee Inspection Report By Mile - Spring 2019**

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Steamboat Slough	Right	6.71	03/12/2019 03/12/2019	David Julian

LM Start	4.38	Rating **	M	Issue No.		19			
LM End	4.39	Issue Type +	Ма	Location *		LS			
Category	Earthen L	evee		GPS La	atitud	le/Longitude			
Category				Start		End			
Item	Vegetatio	n		38.1953	32°	38.195310°			
пеш				-121.6197	49°	-121.619801 °			
DWR ID	DWR_RD0	501_01_f _ 201	7_19						
		Comn	nent Cod	le					
V4 : Elderk	perries are	blocking visib	ility and	flood fight	сара	ability.			
		Inspecto	or Comm	nent					

No Photos

	4.40	D-ti**		Innua Na			_
LM Start	4.48	Rating **	М	Issue No.		62	
LM End	4.58	Issue Type +	En	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Category				Start		End	
Item	Vegetatio	n		38.1947	95°	38.194413	0
пеш				-121.6214	38°	-121.623127	0
DWR ID	DWR_RD0	501_01_f _ 201	8_62				
		Comn	nent Cod	de			
V6 : Lands	scaping						
		Inspecto	or Comm	nent			

No Photos

N: Not Inspected/Rated C: Corrected A/W: Acceptable but Monitor & Maintain + Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

# Levee Inspection Report By Mile - Spring 2019

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Steamboat Slough	Right	6.71	03/12/2019 03/12/2019	David Julian

LM Start	4.57	Rating **	М	Issue No.		159
LM End	4.57	Issue Type +	En	Location *		
Category	Suppleme	ental	GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR UCI	P Field Study		38.1944	38°	38.194438 °
пеш				-121.6230	63 °	-121.623063 °
DWR ID	21103					

# Comment Code

#### Inspector Comment

FS\_ID:44720 DS\_ID:21103 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: Need to verify type of abandonment and if needed

abandon it properly.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 12-inch pipe of an unknown material or purpose through the levee, 3 feet below the crown. 1.5-inch electrical conduit is visible on the landside (LS) slope, 3 feet below the crown, good indicator for the pipe crossing. [Additional Reference(s): USACE Sacramento O&M Manual 105, April 1959, (HLM 4.9)].

FS Date: 4/21/2015

LM Start	4.57	Rating **	М	Issue No.	159 (cont)
LM End	4.57	Issue Type +	En	Location *	



Pipe visible on LS slope. Succulants mound up over pipe.

#### Photo 2 of 3: UCIP\_SP\_2019\_44720\_73903.jpg



Mound at pipe visible on LS slope.

# Levee Inspection Report By Mile - Spring 2019

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Steamboat Slough	Right	6.71	03/12/2019 03/12/2019	David Julian

LM Start	4.57	Rating **	М	Issue No.	159 (cont)			
LM End	4.57	Issue Type +	En	Location *				
Category	ental	GPS La	tituc	le/Longitude				
Calegory				Start		End		
Item	DWR UC	P Field Study		38.19443	38°	38.194438 °		
пеш				-121.62306	33°	-121.623063 °		
DWR ID	21103							
	Comment Code							

# Inspector Comment

FS\_ID:44720 DS\_ID:21103 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: Need to verify type of abandonment and if needed

abandon it properly.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 12-inch pipe of an unknown material or purpose through the levee, 3 feet below the crown. 1.5-inch electrical conduit is visible on the landside (LS) slope, 3 feet below the crown, good indicator for the pipe crossing. [Additional Reference(s): USACE Sacramento O&M Manual 105, April 1959, (HLM 4.9)].

FS Date: 4/21/2015



Depression on WS shoulder accross from pipe may be a good indicator of pipe location.

LM Start	4.99	Rating **	М	Issue No.	64					
LM End	5.04	Issue Type +	En	Location *		LS				
Category Earthen Levee				GPS L	atitud	le/Longitude				
				Start		End				
Item	Vegetation				02°	38.195050	0			
item				-121.630603 °		-121.631570	0			
DWR ID	DWR_RD0	501_01_f _ 201	8_64							
		Comn	nent Cod	le						
V6 : Lands	V6 : Landscaping									
	Inspector Comment									

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS : Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

# Levee Inspection Report By Mile - Spring 2019

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Steamboat Slough	Right	6.71	03/12/2019 03/12/2019	David Julian

LM Start	5.04	Rating **	М	Issue No.		160
LM End	5.04	Issue Type +	En	Location *		
Category	Supplemental					le/Longitude
Calegory				Start		End
Item	DWR UC	IP Field Study		38.19500	)9°	38.195009°
пеш				-121.63154	8°	-121.631548 °
DWR ID	21018					

# Inspector Comment

Comment Code

FS\_ID:44726 DS\_ID:21018 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Crossing appears abandoned as there are no connections at siphon pump on LS shoulder. If it is abandoned it

should be done so properly.

FIELD\_STRUCT\_DESC: 14-inch steel irrigation siphon pipe sleeved through a 16-inch steel pipe through the levee, 3 feet below the crown. Annular space grouted. Siphon pump/breaker on the landside (LS) shoulder. Steel standpipe with a slide gate at the LS toe. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959, (HLM 5.4), 16-inch pipe listed].

FS Date: 4/23/2015

LM Start	5.04	Rating **	М	Issue No.	160 (cont)
LM End	5.04	Issue Type +	En	Location *	

### Photo 1 of 3: UCIP\_SP\_2019\_44726\_73922.jpg



Siphon pump on LS shoulder. No connection at this time.

Photo 2 of 3: UCIP\_SP\_2019\_44726\_73921.jpg



Steel standpipe and gatevalve on LS toe.

# **Levee Inspection Report By Mile - Spring 2019**

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Steamboat Slough	Right	6.71	03/12/2019 03/12/2019	David Julian

LM Start	5.04	Rating **	М	Issue No.		160 (cont)
LM End	5.04	Issue Type +	En	Location *		
Category			GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR UC	IP Field Study		38.19500	9°	38.195009°
пеш				-121.63154	8°	-121.631548°
DWR ID	21018					

#### Comment Code

#### Inspector Comment

FS\_ID:44726 DS\_ID:21018 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Crossing appears abandoned as there are no connections at siphon pump on LS shoulder. If it is abandoned it

should be done so properly.

FIELD\_STRUCT\_DESC: 14-inch steel irrigation siphon pipe sleeved through a 16-inch steel pipe through the levee, 3 feet below the crown. Annular space grouted. Siphon pump/breaker on the landside (LS) shoulder. Steel standpipe with a slide gate at the LS toe. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959, (HLM 5.4), 16-inch pipe listed].

FS Date: 4/23/2015



Pipe visible on WS toe.

	LM Start	5.06	Rating **	A/W	Issue No.		144	
	LM End	5.15	Issue Type +	Ob	Location *		WS	
	Category	Earthen L	evee		GPS La	atitud	le/Longitude	
					Start		End	
	Item	Vegetatio	n		38.1950	12 °	38.194563	٥
	пеш				-121.6318	97 °	-121.633400	٥
	DWR ID	DWR_RD0501_01_f _ 2013_144						

#### Comment Code

V8 : Environmental Requirements.

### Inspector Comment

Veg Site USACE RD 501 SB RM.16.6R DEPARTMENT OF WATER RESOURCES

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Spring 2019

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Steamboat Slough	Right	6.71	03/12/2019 03/12/2019	David Julian

LM Start	5.77	М	Issue No.	21			
LM End	5.84	Issue Type +	Ma	Location *	WS		
Category			GPS La	titud	e/Longitude		
Calegory				Start		End	
Item		2017 USACE Erosion Survey,			01 °	38.189311 °	
пеш	DRAFT			-121.6431	60°	-121.643917°	
DWR ID	DWR_RD0501_01_f _ 2018_21						
	Comment Code						

#### Inspector Comment

2017 Site ID: STM 15.7 R

Status: Eroding

2017 Field Notes: No observed change.

Site History: 2008 - Overstepped levee section with multiple small pockets of erosion 10 - 20 ft wide. 2013 - Site has fresh erosion and

taller vertical sections.
Spring 2019 Notes: Tree fallen next to worst of erosion spot during

February highwater events

LM Start	5.77	Rating **	М	Issue No.	21 (cont)
LM End	5.84	Issue Type +	Ma	Location *	WS

#### Photo 1 of 2: SP\_2019\_RD0501\_169\_21\_20190314\_00073.jpg



View looking downstream at tree that recently fell next to worst of the erosion spots. Tree fell during the February 2019 highwater events (Spring 2019).

#### Photo 2 of 2: SP\_2019\_RD0501\_169\_21\_20190311\_00002.jpg



USACE 2013 Photo #1

# Levee Inspection Report By Mile - Spring 2019

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Steamboat Slough	Right	6.71	03/12/2019 03/12/2019	David Julian

LM Start	5.89	Rating **	U	Issue No.		38
LM End	5.89	Issue Type +	Ma	Location *		LS
Category Earthen Levee			GPS Latitude/Longitude			
Calegory				Start		End
Item	Trim / Thin Trees			38.1888	70°	38.188870 °
пеш				-121.6447	32 °	-121.644732 °
DWR ID	DWR_RD0501_01_f _ 2017_38					

#### Comment Code

T2: Thin trees to allow visibility of the ground and room to flood fight.

#### Inspector Comment

Trim/thin/remove trees and undergrowth to allow inspection and access to slope and toe.

#### Photo 1 of 1: SP\_2019\_RD0501\_169\_38\_20190311\_00007.jpg



View of trees and undergrowth on landside slope and toe.

LM Start	5.94	Rating **	С	Issue No.		39
LM End	6.15	Issue Type +	Ma	Location *		LS
Category	Category Earthen Levee			GPS Latitude/Longitude		
Calegory			Start		End	
Item	Vegetation			38.1882	33°	38.186090 °
пеш				-121.6453	98 °	-121.648027 °
DWR ID	DWR_RD0	501_01_f _ 201	7_39			

#### Comment Code

V2 : Remove the wild growth other than native grasses from the levee slopes.

#### Inspector Comment

Heavy blackberry growth along toe should be removed to allow inspection and access to toe. LMA reports ditch near toe inhibits ability to mow.

No Photos

LM Start	<b>6.14</b> Rating ** U			Issue No.		67	
LM End	6.14	Issue Type +	Ob	Location *		LS	
Category Earthen Levee			GPS La	titud	e/Longitude		
Calegory				Start		End	
Item	Seepage / Sandboils			38.1861	35 °	38.186135 °	0
пеш				-121.6479	02 °	-121.647902 °	0
DWR ID	DWR_RD0	501_01_s _ 201	9_67				

# Comment Code

Inspector Comment

Evidence of seepage. Area dries out in summer and then returns with high water according to LMA. Tules growing. Water has an oily texture.

#### Photo 1 of 1: SP\_2019\_RD0501\_169\_67\_20190314\_00074.jpg



View of seepage at the landside toe due to Spring 2019 highwater (Spring 2019).

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Spring 2019

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Steamboat Slough	Right	6.71	03/12/2019 03/12/2019	David Julian

LM Start	6.15	Rating **	М	Issue No.		40		
LM End	6.15	Issue Type +	Ma	Location *	LS			
Category	Earthen L	evee		GPS La	atitud	le/Longitude		
Calegory				Start		End		
Item	Trim / Thin Trees				90°	38.186090°		
item				-121.648022 °		-121.648022 °		
DWR ID	DWR_RD0	501_01_f _ 201	7_40	'				
		Comn	nent Cod	le				
T2 : Thin to	rees to allo	ow visibility of	the grou	nd and roo	m to	flood fight.		
	Inspector Comment							

No Photos

LM Start	6.49	Rating **	М	Issue No.		22		
LM End	6.68	Issue Type +	En	Location *		WS		
Category	evee	GPS La	atitud	e/Longitude				
Category				Start		End		
Item	Vegetation				39°	38.183923 °		
пеш				-121.6538	65 °	-121.657321 °		
DWR ID	DWR_RD0	501_01_s _ 201	2_22					
Comment Code								
V6 : Lands	V6 : Landscaping							

Inspector Comment

No Photos

LM Start	6.51	Rating **	М	Issue No.		68	
LM End	6.64 Issue Type + En			Location *		WS	
Catagony	Earthen Levee			GPS La	atitud	le/Longitude	
Calegory	Category					End	
Item	Encroach	Encroachments				38.183758	0
item				-121.6542	20°	-121.656495	0
DWR ID	DWR_RD0501_01_s _ 2019_68						

FE : Fence

Inspector Comment

Comment Code

A chainlink fence is located on the waterside slope.



View of chainlink fence on the waterside slope (Spring 2019).

* Location		** Rating		+ Issue Type
LS: Land Side	N/A: Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS: Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR · Crown		U : Unaccentable	A/W · Acceptable but Monitor & Maintain	En : Enforcement

# Levee Inspection Report By Mile - Spring 2019

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Steamboat Slough	Right	6.71	03/12/2019 03/12/2019	David Julian

LM Start	6.59	Rating **	M	Issue No.		23				
LM End	6.62	Issue Type +	Ма	Location *		WS				
Category	Earthen L	evee		GPS La	atitud	e/Longitude				
Calegory				Start		End				
Item	Trim / Thi	n Trees		38.1841	36°	38.184040 °				
пеш				-121.6557	62°	-121.656291 °				
DWR ID	DWR_RD0	501_01_s _ 201	2_23							
		Comn	nent Cod	le						
T1 : Trim t	rees to at l	east five feet	above g	round level						
	Inspector Comment									

No Photos

LM Start	6.65	6.65 Rating ** M		Issue No.		41	
LM End	6.70	Issue Type + En		Location *		WS	
Catagony	Earthen L	evee	GPS La	atitud	e/Longitude		
Category				Start		End	
Item	Vegetatio	n		38.1840	20°	38.184013°	
iteiii		-121.6568	15 °	-121.657643°			
DWR ID	DWR RD0501 01 f 2017 41						

#### Comment Code

V6 : Landscaping

#### Inspector Comment

Trees/oleanders should be trimmed or removed to allow inspection and access to waterside slope.



View of trees/oleanders on the waterside slope.

# Levee Inspection Report By Mile - Spring 2019

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Steamboat Slough	Right	6.71	03/12/2019 03/12/2019	David Julian

LM Start	6.66	Rating **	М	Issue No.		161		
LM End	6.66	Issue Type +	En	Location *				
Category	Supplemental					GPS Latitude/Longitude		
Calegory				Start		End		
Item	DWR UC	IP Field Study		38.18396 <sup>2</sup>	°	38.183961 °		
пеш		-121.656860	°	-121.656860 °				
DWR ID	21020							

# Comment Code

#### Inspector Comment

FS\_ID:32530 DS\_ID:21020 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) through the slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. If structure is no longer used--Need to contact owner to determine status. If crossing is no longer used owner will need to coordinate with CVFPB.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 16-inch irrigation discharge pipe of an unknown material through the levee, 6.5 feet below the crown. Siphon breaker and service pole on the landside (LS) shoulder. Electrical box at the LS toe. Pump on a pile structure in the channel. 3-inch steel sewer pipe sleveed through 16-inch pipe. Annular space grouted. ([Additional Reference(s): DWR Levee Log, 2005]. FS Date: 6/4/2013

LM Start	6.66	Rating **	М	Issue No.	161 (cont)
LM End	6.66	Issue Type +	En	Location *	

#### Photo 1 of 3: UCIP\_SP\_2019\_32530\_58957.jpg



Abandoned 16-inch pipe on landward side.

#### Photo 2 of 3: UCIP\_SP\_2019\_32530\_58956.jpg



Overview of waterward side--section of pipe visible through dense vegetation.

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma: Maintenance Deficiency

Ob: Design & System Obsolescence

En: Enforcement

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# Levee Inspection Report By Mile - Spring 2019

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Steamboat Slough	Right	6.71	03/12/2019 03/12/2019	David Julian

LM Start	6.66	Rating **	М	Issue No.		161 (cont)		
LM End	6.66	Issue Type +	En	Location *				
Catagory	Category Supplemental				GPS Latitude/Longitude			
Calegory						End		
Item	DWR UC	IP Field Study		38.18396	1°	38.183961 °		
пеш				-121.656860	°	-121.656860 °		
DWR ID	21020							

# Comment Code

#### Inspector Comment

FS\_ID:32530 DS\_ID:21020 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) through the slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. If structure is no longer used--Need to contact owner to determine status. If crossing is no longer used owner will need to coordinate with CVFPB.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 16-inch irrigation discharge pipe of an unknown material through the levee, 6.5 feet below the crown. Siphon breaker and service pole on the landside (LS) shoulder. Electrical box at the LS toe. Pump on a pile structure in the channel. 3-inch steel sewer pipe sleveed through 16-inch pipe. Annular space grouted. ([Additional Reference(s): DWR Levee Log, 2005]. FS Date: 6/4/2013

Photo 3 of 3: UCIP\_SP\_2019\_32530\_58955.jpg



Electrical box visible on landward toe.

#### **Unit Cover Sheet**

**Spring 2019 Levee Inspection Results** 

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles
Unit No. 02 Cache Slough	Left	3.56

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)				
Date of Inspection	3/12/2019 - 3/12/2019			
DWR Inspector	David Julian			
Accompanied By	Nick Zepeda Reclamation District 501			

#### Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

#### http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

# Levee Inspection Report By Mile - Spring 2019

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	3.56	03/12/2019 03/12/2019	David Julian

LM Start	0.00	Rating **	М	Issue No.		2		
LM End	0.09	Issue Type +	En	Location *		WS		
Category Earthen Levee			GPS Latitude/Longitude					
			Start		End			
Itom	ltem Encroachments			38.1840	50°	38.185178°		
пеш				-121.657713 °		-121.658515°		
DWR ID	DWR_RD0	501_02_s _ 201	2_2					
		Comn	nent Cod	le				
FE : Fence	<del>)</del>							
Inspector Comment								
This is the	This is the chainlink fence behind the guardrail.							

Photo 1 of 1 : SP\_2019\_RD0501\_170\_2\_20190311\_00001.jpg



Chainlink fence behind guardrail is not permitted.

LM Start	0.00	Rating **	М	Issue No.		19	
LM End	0.04	Issue Type + En		Location *		WS	
Category	Earthen L	evee	GPS La	atitud	e/Longitude		
Calegory				Start		End	
Item	Vegetatio		38.1840	33 °	38.184412 °		
item				-121.6577	30°	-121.658257 °	
DWR ID	DWR_RD0	501_02_f _ 201	7_19				

Comment Code

V6 : Landscaping

#### Inspector Comment

Trees/oleanders should be removed or trimmed to allow inspection and access.

No Photos

LM Start	0.16	Rating **	М	Issue No.		17			
LM End	0.16	Issue Type +	Ма	Location *		WS			
Category	Earthen Levee						GPS La	atitud	e/Longitude
Calegory			Start		End				
Item	Vegetation			38.1860	68°	38.186068 °			
Item			-121.6590	12 °	-121.659012 °				
DWR ID	DWR_RD0501_02_f _ 2018_17								

#### Comment Code

V1 : Control annual grass and weeds on the levee slopes and easements.

Inspector Comment



View of thick vegetation at the top of the water side slope (November 2018).

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS : Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

# Levee Inspection Report By Mile - Spring 2019

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	3.56	03/12/2019 03/12/2019	David Julian

LM Start	0.56	Rating **	М	Issue No.		26	
LM End	0.56	Issue Type +	En	Location *			
Category Supplemental				GPS Latitude/Longitude			
				Start		End	
Item	DWR UC	IP Field Study		38.1914	52 °	38.191452°	
пеш			-121.6561	88 °	-121.656188 °		
DWR ID	WR ID 21035						
Comment Code							

#### Inspector Comment

FS\_ID:32531 DS\_ID:21035 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) through the slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Need to determine owner and status of crossing.

FIELD\_STRUCT\_DESC: 10-inch irrigation discharge pipe of an unknown material sleeved through a 12-inch pipe of an unknown material through the levee, 5 feet below the crown. Pump on the waterside (WS). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959, (HLM 0.6)]. FS Date: 6/7/2013

LM Start	0.56	Rating **	М	Issue No.	26 (cont)
LM End	0.56	Issue Type +	En	Location *	



View of crown.

#### Photo 2 of 3: UCIP\_SP\_2019\_32531\_58958.jpg



Overview of waterward side. Inaccessible due to dense vegetation.

# **Levee Inspection Report By Mile - Spring 2019**

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	3.56	03/12/2019 03/12/2019	David Julian

LM Start	0.56	Rating **	М	Issue No.		26 (cont)		
LM End	0.56	Issue Type +	En	Location *				
Category				GPS Latitude/Longitude				
Calegory	Calegory					End		
Item	DWR UCI	P Field Study		38.1914	52 °	38.191452		
item				-121.6561	88 °	-121.656188		
DWR ID	21035							

#### Comment Code

#### Inspector Comment

FS\_ID:32531 DS\_ID:21035 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) through the slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Need to determine owner and status of crossing.

FIELD\_STRUCT\_DESC: 10-inch irrigation discharge pipe of an unknown material sleeved through a 12-inch pipe of an unknown material through the levee, 5 feet below the crown. Pump on the waterside (WS). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento 0&M Manual 105, April 1959, (HLM 0.6)].

FS Date: 6/7/2013



Overview of landward side.

LM Start	0.65	Rating **	М	Issue No.		23	
LM End	0.75	Issue Type +	Ma	Location *	LS		
Category	evee	GPS Latitude/Longitude					
Category	Category					End	
Item	Vegetatio	Vegetation				38.194068°	
item		-121.65545	52 °	-121.655160°			
DWR ID	DWR_RD0	501_02_s _ 201	9_23				

#### Comment Code

V1 : Control annual grass and weeds on the levee slopes and easements.

#### Inspector Comment

Remove annual vegetation from landside slope.

# Photo 1 of 1 : SP\_2019\_RD0501\_170\_23\_20190314\_00044.jpg



View looking upstream at vegetation on the landside slope (Spring 2019).

# **Levee Inspection Report By Mile - Spring 2019**

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	3.56	03/12/2019 03/12/2019	David Julian

LM Start	0.86	Rating **	U	Issue No.		27
LM End	0.86	Issue Type +	En	Location *		
Category	ental	GPS Latitude/Longitude				
Calegory	Category					End
Item	DWR UC	IP Field Study		38.19558	8 °	38.195588 °
item				-121.65518	9°	-121.655189°
DWR ID	21092					

#### Comment Code

#### Inspector Comment

FS\_ID:53353 DS\_ID:21092 EP\_NO: 3703 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 07/24/2018 Same as last inspection. Could not inspect WS due to overgrown vegetation. Keeping Urgent due to pipe integrity concerns and threat to levee integrity (D. Sanoski - DWR UCIP).8/22/2016 Same as last inspection -- pipe is deteriorating and breaking apart (visible on WS). (DWR UCIP - omagana)6/07/2013 Deteriorated pipe with holes present at intake. Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) through the slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. If crossing is no longer used --owner will need coordinate with CVFPB to address crossing. Need to coordinate with DWR Inspector and CVFPB. (DWR UCIP - omagana)

FIELD\_STRUCT\_DESC: \*ABANDONED\* 8-inch steel irrigation siphon pipe through the levee, 1.7 feet below the crown. Siphon breaker on the apex of the pipe on the landside (LS) shoulder. Pipe discharges into a concrete sump near the LS toe. Pipe is exposed along the LS slope. Second 8-inch pipe approximately 1 foot apart is visible on the LS. Pipe is also visible on the waterside (WS). (Retention of an existing 8-inch siphon pipe through the levee authorized under Permit No. 3703, 1961 -Enzo Guidi). [Additional Reference(s): DWR Levee Log, 2005].

FS Date: 7/24/2018 3:43:00 PM

LM St	art	0.86	Rating **	U	Issue No.	27 (cont)
LM E	nd	0.86	Issue Type +	En	Location *	

#### Photo 1 of 3: UCIP\_SP\_2019\_53353\_58967.jpg



Overview of WS--20 foot berm present.

#### Photo 2 of 3: UCIP\_SP\_2019\_53353\_58965.jpg



View of WS. Inspector is standing near exposed section of pipe at levee

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Spring 2019

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	3.56	03/12/2019 03/12/2019	David Julian

LM Start	0.86	Rating **	U	Issue No.		27 (cont)
LM End	0.86	Issue Type +	En	Location *		
Category	ental	GPS Latitude/Longitude				
Calegory	Category					End
Item	DWR UC	DWR UCIP Field Study			8 °	38.195588°
пеш			-121.65518	9°	-121.655189°	
DWR ID	21092					

#### Comment Code

#### Inspector Comment

FS\_ID:53353 DS\_ID:21092 EP\_NO: 3703 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 07/24/2018 Same as last inspection. Could not inspect WS due to overgrown vegetation. Keeping Urgent due to pipe integrity concerns and threat to levee integrity (D. Sanoski - DWR UCIP).8/22/2016 Same as last inspection -- pipe is deteriorating and breaking apart (visible on WS). (DWR UCIP - omagana)6/07/2013 Deteriorated pipe with holes present at intake. Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) through the slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. If crossing is no longer used --owner will need coordinate with CVFPB to address crossing. Need to coordinate with DWR Inspector and CVFPB. (DWR UCIP - omagana)

FIELD\_STRUCT\_DESC: \*ABANDONED\* 8-inch steel irrigation siphon pipe through the levee, 1.7 feet below the crown. Siphon breaker on the apex of the pipe on the landside (LS) shoulder. Pipe discharges into a concrete sump near the LS toe. Pipe is exposed along the LS slope. Second 8-inch pipe approximately 1 foot apart is visible on the LS. Pipe is also visible on the waterside (WS). (Retention of an existing 8-inch siphon pipe through the levee authorized under Permit No. 3703, 1961 - Enzo Guidi). [Additional Reference(s): DWR Levee Log, 2005]. FS Date: 7/24/2018 3:43:00 PM

# Photo 3 of 3: UCIP\_SP\_2019\_53353\_58966.jpg



Deteriorated pipe with visible holes through pipe wall.

# Levee Inspection Report By Mile - Spring 2019

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	3.56	03/12/2019 03/12/2019	David Julian

LM Start	0.86	Rating **	U	Issue No.		28	
LM End	0.86	Issue Type +	En	Location *			
Category				GPS Latitude/Longitude			
Calegory	Calegory					End	
Item	DWR UC	IP Field Study		38.195600	°	38.195600 °	
item		-121.65519 <sup>2</sup>	0	-121.655191 °			
DWR ID	21036						

# Inspector Comment

Comment Code

FS\_ID:53354 DS\_ID:21036 EP\_NO: 1902 Repair Type: Urgent Crossing Status: Found

FS Date: 7/24/2018 3:36:00 PM

UCIP Comments: 07/24/2018 Same as last inspection. Could not inspect WS due to overgrown vegetation. Keeping Urgent due to pipe integrity concerns and threat to levee integrity (D. Sanoski - DWR UCIP).8/22/2016 Same as previous inspection. Pipe is deteriorating and open on WS. (DWR UCIP - omagana)6/07/2013 Reason for an Urgent Priority is due to adjacent crossing--adjacent crossing has holes present and is was installed in the 1960s. Our records show this pipe was installed before 1955. Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) through the slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. If crossing is no longer in use--Owner will need to coordinate with DWR Inspector and CVFPB. Need to determine condition of pipe--request maintenance records from owner once found-this crossing could be capped and grouted--NEED RECORDS. (DWR UCIP - omagana) FIELD\_STRUCT\_DESC: \*ABANDONED\* 8-inch steel irrigation siphon pipe encased in a 10-inch, 14 gage corrugated metal pipe (CMP) through the levee, 1.7 feet below the crown. Siphon breaker on the apex of the pipe on the landside (LS) shoulder. Pipe discharges into a concrete sump near the LS toe. Pipe exposed along the LS slope. (Plans for replacing an existing pipe through the levee authorized under Permit No. 1902, 1954 - Enzo Guidi). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959, (HLM 0.9)].

## Photo 1 of 3: UCIP\_SP\_2019\_53354\_58968.jpg



8-inch pipes approximately 1 foot apart.

# Levee Inspection Report By Mile - Spring 2019

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	3.56	03/12/2019 03/12/2019	David Julian

LM Start	0.86	Rating **	U	Issue No.		28 (cont)	
LM End	0.86	Issue Type +	En	Location *			
Category				GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UC	IP Field Study		38.19560	o°	38.195600	0
пеш				-121.65519	1°	-121.655191	0
DWR ID	21036						

# Inspector Comment

Comment Code

FS\_ID:53354 DS\_ID:21036 EP\_NO: 1902 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 07/24/2018 Same as last inspection. Could not inspect WS due to overgrown vegetation. Keeping Urgent due to pipe integrity concerns and threat to levee integrity (D. Sanoski - DWR UCIP).8/22/2016 Same as previous inspection. Pipe is deteriorating and open on WS. (DWR UCIP - omagana)6/07/2013 Reason for an Urgent Priority is due to adjacent crossing--adjacent crossing has holes present and is was installed in the 1960s. Our records show this pipe was installed before 1955. Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) through the slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. If crossing is no longer in use--Owner will need to coordinate with DWR Inspector and CVFPB. Need to determine condition of pipe--request maintenance records from owner once found-this crossing could be capped and grouted--NEED RECORDS. (DWR UCIP - omagana) FIELD\_STRUCT\_DESC: \*ABANDONED\* 8-inch steel irrigation siphon pipe encased in a 10-inch, 14 gage corrugated metal pipe (CMP) through the levee, 1.7 feet below the crown. Siphon breaker on the apex of the pipe on the landside (LS) shoulder. Pipe discharges into a concrete sump near the LS toe. Pipe exposed along the LS slope. (Plans for replacing an existing pipe through the levee authorized under Permit No. 1902, 1954 - Enzo Guidi). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959, (HLM 0.9)]. FS Date: 7/24/2018 3:36:00 PM

## Photo 2 of 3: UCIP\_SP\_2019\_53354\_58970.jpg



Overview of waterward side--20 foot berm present.

# Levee Inspection Report By Mile - Spring 2019

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	3.56	03/12/2019 03/12/2019	David Julian

LM Start	0.86	Rating **	U	Issue No.		28 (cont)
LM End	0.86	Issue Type +	En	Location *		
Category	ental	GPS Latitude/Longitude				
Calegory						End
Item	DWR UC	IP Field Study		38.19560	00°	38.195600 °
пеш				-121.65519	91 °	-121.655191 °
DWR ID	21036					

# Inspector Comment

Comment Code

FS\_ID:53354 DS\_ID:21036 EP\_NO: 1902 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 07/24/2018 Same as last inspection. Could not inspect WS due to overgrown vegetation. Keeping Urgent due to pipe integrity concerns and threat to levee integrity (D. Sanoski - DWR UCIP).8/22/2016 Same as previous inspection. Pipe is deteriorating and open on WS. (DWR UCIP - omagana)6/07/2013 Reason for an Urgent Priority is due to adjacent crossing--adjacent crossing has holes present and is was installed in the 1960s. Our records show this pipe was installed before 1955. Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) through the slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. If crossing is no longer in use--Owner will need to coordinate with DWR Inspector and CVFPB. Need to determine condition of pipe--request maintenance records from owner once found-this crossing could be capped and grouted--NEED RECORDS. (DWR UCIP - omagana) FIELD\_STRUCT\_DESC: \*ABANDONED\* 8-inch steel irrigation siphon pipe encased in a 10-inch, 14 gage corrugated metal pipe (CMP) through the levee, 1.7 feet below the crown. Siphon breaker on the apex of the pipe on the landside (LS) shoulder. Pipe discharges into a concrete sump near the LS toe. Pipe exposed along the LS slope. (Plans for replacing an existing pipe through the levee authorized under Permit No. 1902, 1954 - Enzo Guidi). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959, (HLM 0.9)]. FS Date: 7/24/2018 3:36:00 PM



View of wateward side--dense vegetation limits inspection. Unable to locate pipe on waterward side.

# **Levee Inspection Report By Mile - Spring 2019**

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	3.56	03/12/2019 03/12/2019	David Julian

LM Start	1.03	Rating **	M	Issue No.		20
LM End	1.03	Issue Type +	En	Location *		LS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory				Start		End
Item	Vegetatio	n	38.1979	77°	38.197977°	
пеш				-121.6556	00°	-121.655600 °
DWR ID	DWR_RD0	501_02_f _ 201	7_20			
		Comn	nent Cod	le		
V6 : Lands	caping					
Inspector Comment						
Trim fig and other trees to 5' above slope to allow inspection and access.						

No Photos

LM Start	1.15	Rating **	М	Issue No.		29	
LM End	1.15	Issue Type +	En	Location *			
Category Supplemental				GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UC	IP Field Study	,	38.19981	6°	38.199816	0
item				-121.65539	95 °	-121.655395	0
DWR ID	21038						

#### Comment Code

#### Inspector Comment

FS\_ID:44865 DS ID:21038 EP\_NO: 2817

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) through the slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Scour hole located on waterward side. FIELD\_STRUCT\_DESC: 20-inch steel drainage discharge pipe sleeved through a 24-inch steel pipe through the levee, 9 feet below the crown. Flap gate on the waterside (WS) end. Cutoff wall around the pipe at each shoulder. Pipe exposed along both slopes. Rock revetment on the WS slope. Berm on the WS is over 20 feet. (Plans to install a drainage pipe through the levee authorized under Permit No. 2817, 1958 Reclamation District No. 501 [RD0501]). [Additional Reference(s): DWR Levee Log, 2005]. FS Date: 6/7/2013

Photo 1 of 3: UCIP\_SP\_2019\_44865\_58975.jpg



View of levee crown at crossings.

# Levee Inspection Report By Mile - Spring 2019

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	3.56	03/12/2019 03/12/2019	David Julian

LM Start	1.15	Rating **	М	Issue No.		29 (cont)	
LM End	1.15	Issue Type +	En	Location *			
Supplemental Supplemental				GPS Latitude/Longitude			
Calegory			Start		End		
Item	DWR UCI	IP Field Study		38.19981	16°	38.199816	٥
пеш				-121.65539	95 °	-121.655395	0
DWR ID	21038						

# Comment Code

#### Inspector Comment

FS\_ID:44865 DS\_ID:21038 EP\_NO: 2817

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) through the slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Scour hole located on waterward side. FIELD\_STRUCT\_DESC: 20-inch steel drainage discharge pipe sleeved through a 24-inch steel pipe through the levee, 9 feet below the crown. Flap gate on the waterside (WS) end. Cutoff wall around the pipe at each shoulder. Pipe exposed along both slopes. Rock revetment on the WS slope. Berm on the WS is over 20 feet. (Plans to install a drainage pipe through the levee authorized under Permit No. 2817, 1958 - Reclamation District No. 501 [RD0501]). [Additional Reference(s): DWR Levee Log, 2005].

LM Start	1.15	Rating **	М	Issue No.	29 (cont)
LM End	1.15	Issue Type +	En	Location *	

# Photo 2 of 3: UCIP\_SP\_2019\_44865\_58972.jpg



View of waterward side--pipe section exposed and siphon breaker. Over 20 feet berm on waterward side.

#### Photo 3 of 3: UCIP\_SP\_2019\_44865\_58974.jpg



Waterward side--2-24 inch pipe inlets.

# Levee Inspection Report By Mile - Spring 2019

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	3.56	03/12/2019 03/12/2019	David Julian

LM Start	1.16	Rating **	М	Issue No.		30
LM End	1.16	Issue Type +	En	Location *		
Category				GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UC	IP Field Study		38.19983	7 °	38.199837 °
пеш				-121.65539 <sup>-</sup>	۱°	-121.655391 °
DWR ID	21094					

# Inspector Comment

Comment Code

FS\_ID:44866 DS\_ID:21094 EP\_NO: 14491

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) through the slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Scour hole present on waterward side. FIELD\_STRUCT\_DESC: 24-inch coated steel drainage discharge pipe through the levee, 4.5 feet below the crown. Cutoff wall around the pipe at the center of the levee. Siphon breaker on the apex of the pipe at the waterside (WS) shoulder. Pump on the landside (LS). (Plans to install a 24-inch water discharge pipe through the levee authorized under Permit No. 14491, 1986 - Reclamation District No. 501 [RD0501]).

FS Date: 6/7/2013

LM Start	1.16	Rating **	М	Issue No.	30 (cont)
LM End	1.16	Issue Type +	En	Location *	

# Photo 1 of 3 : UCIP\_SP\_2019\_44866\_58981.jpg

View of downstream crown.

#### Photo 2 of 3: UCIP\_SP\_2019\_44866\_58979.jpg



Two pipes on waterside.

# Levee Inspection Report By Mile - Spring 2019

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	3.56	03/12/2019 03/12/2019	David Julian

LM Start	1.16	Rating **	М	Issue No.		30 (cont)	
LM End	1.16	Issue Type +	En	Location *			
Category	Suppleme	ental		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	DWR UC	IP Field Study		38.1998	37°	38.199837	0
пеш				-121.6553	91 °	-121.655391	0
DWR ID	21094						

#### Comment Code

#### Inspector Comment

FS\_ID:44866 DS\_ID:21094 EP\_NO: 14491

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) through the slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Scour hole present on waterward side. FIELD\_STRUCT\_DESC: 24-inch coated steel drainage discharge pipe through the levee, 4.5 feet below the crown. Cutoff wall around the pipe at the center of the levee. Siphon breaker on the apex of the pipe at the waterside (WS) shoulder. Pump on the landside (LS). (Plans to install a 24-inch water discharge pipe through the levee authorized under Permit No. 14491, 1986 - Reclamation District No. 501 [RD0501]).

FS Date: 6/7/2013

## Photo 3 of 3: UCIP\_SP\_2019\_44866\_58976.jpg



Siphon breaker located at the waterward shoulder.

LM Start	1.25	Rating **	М	Issue No.		31	
LM End	1.25	Issue Type +	Ма	Location *			
Category	Suppleme	ental		GPS La	titud	e/Longitude	
Calegory				Start		End	
Item	DWR UC	IP LMA Respo	onsibility	38.20114	43 °	38.201143	0
item				-121.65516	69°	-121.655169	0
DWR ID	21085						

### Comment Code

#### Inspector Comment

FS\_ID:44753 DS\_ID:21085 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Hole rusted through pipe on WS end. Pipe

abandoned and should be done so properly.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 20-inch coated steel gravity drainage pipe through the levee, 15.5 feet below the crown. Pipe exposed along the waterside (WS) slope. Steel plate welded over end. [Additional Reference(s): USACE Sacramento O&M Manual 105, April

1959, (HLM 1.4)]. FS Date: 4/23/2015



20-inch pipe with welded steel plate over end on WS toe.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

# **Levee Inspection Report By Mile - Spring 2019**

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	3.56	03/12/2019 03/12/2019	David Julian

LM Start	1.25	Rating **	М	Issue No.		31 (cont)
LM End	1.25	Issue Type +	Ma	Location *		
Category	Suppleme	ental		GPS Lat	itud	le/Longitude
Calegory				Start		End
Item	DWR UC	P LMA Respo	onsibility	38.20114	3°	38.201143°
пеш				-121.65516	9°	-121.655169°
DWR ID	21085					

#### Comment Code

#### Inspector Comment

FS\_ID:44753 DS\_ID:21085 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Hole rusted through pipe on WS end. Pipe

abandoned and should be done so properly.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 20-inch coated steel gravity drainage pipe through the levee, 15.5 feet below the crown. Pipe exposed along the waterside (WS) slope. Steel plate welded over end. [Additional Reference(s): USACE Sacramento O&M Manual 105, April 1959, (HLM 1.4)].

FS Date: 4/23/2015

LM Start	1.25	Rating **	М	Issue No.	31 (cont)
LM End	1.25	Issue Type +	Ma	Location *	





Hole in pipe at WS toe.

#### Photo 3 of 3: UCIP\_SP\_2019\_44753\_73953.jpg



Inside hole in pipe at WS toe.

# Levee Inspection Report By Mile - Spring 2019

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	3.56	03/12/2019 03/12/2019	David Julian

LM Start	1.70	Rating **	М	Issue No.		32
LM End	1.70	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS Lat	tud	e/Longitude
Calegory				Start		End
Item	DWR UC	IP Field Study		38.20750	7°	38.207507°
пеш				-121.65621	9°	-121.656219 °
DWR ID	21093					

# Inspector Comment

Comment Code

FS\_ID:44867 DS\_ID:21093 EP\_NO: 13520

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) through the slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Owner needs to be informed about the vegetation clearance required for proper inspection.

FIELD\_STRUCT\_DESC: 18-inch coated steel irrigation siphon pipe through the levee, 3.4 feet below the crown. Steel cutoff wall around the pipe at the center of the levee. Siphon breaker on the apex of the pipe on the landside (LS) shoulder. Pipe extends from a sump off the LS toe. Pipe exposed along the waterside (WS) slope. Rock revetment on the WS slope. (Plans to remove two siphons and install one 18-inch steel siphon through the levee authorized under Permit No. 13520, 1982 - Lewis Nixon Company).

FS Date: 6/7/2013

LM Start	1.70	Rating **	М	Issue No.	32 (cont)
LM End	1.70	Issue Type +	En	Location *	

## Photo 1 of 3: UCIP\_SP\_2019\_44867\_58987.jpg



Overview of waterside. Dense vegetation.

Photo 2 of 3: UCIP\_SP\_2019\_44867\_58982.jpg



View of waterward side--pipe extends from berm to river.

# Levee Inspection Report By Mile - Spring 2019

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	3.56	03/12/2019 03/12/2019	David Julian

LM Start	1.70	Rating **	М	Issue No.		32 (cont)
LM End	1.70	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS La	atitud	e/Longitude
Calegory				Start		End
Item	DWR UC	IP Field Study		38.2075	07°	38.207507°
пеш				-121.6562	19°	-121.656219 °
DWR ID	21093					

#### Comment Code

#### Inspector Comment

FS\_ID:44867 DS\_ID:21093 EP\_NO: 13520

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) through the slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Owner needs to be informed about the vegetation clearance required for proper inspection.

FIELD\_STRUCT\_DESC: 18-inch coated steel irrigation siphon pipe through the levee, 3.4 feet below the crown. Steel cutoff wall around the pipe at the center of the levee. Siphon breaker on the apex of the pipe on the landside (LS) shoulder. Pipe extends from a sump off the LS toe. Pipe exposed along the waterside (WS) slope. Rock revetment on the WS slope. (Plans to remove two siphons and install one 18-inch steel siphon through the levee authorized under Permit No. 13520, 1982 - Lewis Nixon Company).

FS Date: 6/7/2013

## Photo 3 of 3: UCIP\_SP\_2019\_44867\_58985.jpg



Photo of pipe looking from berm edge to river edge.

LM Start	1.73	Rating **	М	Issue No.		18	
LM End	1.82	Issue Type +	Ма	Location *	WS		
Category Earthen Levee				GPS Latitude/Longitude			
Category		Start		End			
Vegetation Item				38.20803	o°	38.209040°	
пеш				-121.65605	2°	-121.655575 °	
DWR ID	R ID DWR_RD0501_02_f _ 2018_18						

#### Comment Code

V1 : Control annual grass and weeds on the levee slopes and easements.

#### Inspector Comment

Remove vegetation from top 20' of waterside slope.

#### Photo 1 of 1: SP\_2019\_RD0501\_170\_18\_20190311\_00003.jpg



View looking upstream at vegetation on the waterside shoulder (November 2018).

# Levee Inspection Report By Mile - Spring 2019

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	3.56	03/12/2019 03/12/2019	David Julian

LM Start	1.80	Rating **	М	Issue No.		33		
LM End	1.80	Issue Type +	En	Location *				
Category				GPS Latitude/Longitude				
Calegory		Start		End				
DWR UCIP Field Study				38.2088	74°	38.208874°		
пеш				-121.655505 °		-121.655505°		
DWR ID	ID 21042							

## Comment Code

#### Inspector Comment

FS\_ID:40489 DS\_ID:21042 EP\_NO: 15477

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Stacey Boyd, LMA superintendent for RD0501, confirmed the removal and replacement of existing crossing under new permit no. 18811. New crossing will be a 30-inch diameter discharge pipe above the design flood plane. Construction will start soon. Update record once the project is completed. Dense vegetation on both waterside and landside. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. FIELD\_STRUCT\_DESC: 42-inch steel drainage discharge pipe through the levee, 6.5 feet below the crown. Siphon breaker on the waterside (WS) slope. Pump on the landside (LS). Pipe exposed along both slopes. (Plans to replace two pipes with two 36-inch discharge pipes through the levee authorized under Permit No. 15477, 1990 Reclamation District No. 501 [RD0501]). Permit does not match this crossing. Recommend deletion of permit. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959, (HLM 2.0)]. FS Date: 6/7/2013

LM Start	1.80	Rating **	М	Issue No.	33 (cont)
LM End	1.80	Issue Type +	En	Location *	

# Photo 1 of 3 : UCIP\_SP\_2019\_40489\_33358.jpg



Overview of crown, looking downstream.

#### Photo 2 of 3: UCIP SP 2019 40489 33359.jpg



One 42-inch steel pile with siphon break on waterside slope.

# Levee Inspection Report By Mile - Spring 2019

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	3.56	03/12/2019 03/12/2019	David Julian

LM Start	1.80	Rating **	М	Issue No.		33 (cont)		
LM End	1.80	Issue Type +	En	Location *				
Category	Supplemental				GPS Latitude/Longitude			
Calegory			Start		End			
Item	DWR UCIP Field Study				4 °	38.208874 °		
пеш			-121.655505 °		-121.655505 °			
DWR ID	21042							

# Inspector Comment

Comment Code

FS\_ID:40489 DS\_ID:21042 EP\_NO: 15477

FS Date: 6/7/2013

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Stacey Boyd, LMA superintendent for RD0501, confirmed the removal and replacement of existing crossing under new permit no. 18811. New crossing will be a 30-inch diameter discharge pipe above the design flood plane. Construction will start soon. Update record once the project is completed. Dense vegetation on both waterside and landside. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. FIELD\_STRUCT\_DESC: 42-inch steel drainage discharge pipe through the levee, 6.5 feet below the crown. Siphon breaker on the waterside (WS) slope. Pump on the landside (LS). Pipe exposed along both slopes. (Plans to replace two pipes with two 36-inch discharge pipes through the levee authorized under Permit No. 15477, 1990 Reclamation District No. 501 [RD0501]). Permit does not match this crossing. Recommend deletion of permit. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959, (HLM 2.0)].

#### Photo 3 of 3: UCIP\_SP\_2019\_40489\_33357.jpg



Siphon breaker on apex of steel pipe waterside.

### **Levee Inspection Report By Mile - Spring 2019**

## Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	3.56	03/12/2019 03/12/2019	David Julian

LM Start	1.81	Rating **	М	Issue No.		34		
LM End	1.81	Issue Type +	En	Location *				
Supplemental				GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UC	IP Field Study		38.20899	98°	38.208998 °		
пеш				-121.65557	'5 °	-121.655575 °		
DWR ID 21091								

#### Comment Code

#### Inspector Comment

FS\_ID:47049 DS\_ID:21091 EP\_NO: 15477

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) through the slope. Recommend removing vegetation along pipe alignment to conduct proper inspection

of structure and appurtenances.

FIELD\_STRUCT\_DESC: 1 of 2: 36-inch coated steel drainage discharge pipe through the levee, 7 feet below the crown. Siphon breaker on the waterside (WS) shoulder. Pump on the landside (LS). Pipe exposed along both slopes. Pipe supports at levee shoulders were cutoff walls from a preexisting pipe. Pipes are approximately 36 inches apart. (Plans to replace two pipes with two 36-inch discharge pipes through the levee authorized under Permit No. 15477, 1990 - Reclamation District No. 501 [RD0501]). [Additional Reference(s): DWR Levee Log, 2005].

FS Date: 6/7/2013

LM Start	1.81	Rating **	М	Issue No.	34 (cont)
LM End	1.81	Issue Type +	En	Location *	

Photo 1 of 3: UCIP\_SP\_2019\_47049\_33378.jpg



Overview of crown, looking downstream

Photo 2 of 3: UCIP\_SP\_2019\_47049\_33373.jpg



Overview of dual pipes on waterward side.

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	3.56	03/12/2019 03/12/2019	David Julian

LM Start	1.81	Rating **	М	Issue No.		34 (cont)	
LM End	1.81	Issue Type +	En	Location *			
Category			GPS Latitude/Longitude				
Calegory				Start		End	
Item	DWR UC	IP Field Study		38.20899	3°	38.208998	0
пеш			-121.65557	5 °	-121.655575	0	
DWR ID	21091						

## Inspector Comment

Comment Code

FS\_ID:47049 DS\_ID:21091 EP\_NO: 15477

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) through the slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances.

FIELD\_STRUCT\_DESC: 1 of 2: 36-inch coated steel drainage discharge pipe through the levee, 7 feet below the crown. Siphon breaker on the waterside (WS) shoulder. Pump on the landside (LS). Pipe exposed along both slopes. Pipe supports at levee shoulders were cutoff walls from a preexisting pipe. Pipes are approximately 36 inches apart. (Plans to replace two pipes with two 36-inch discharge pipes through the levee authorized under Permit No. 15477, 1990 -

Reclamation District No. 501 [RD0501]). [Additional Reference(s): DWR

Levee Log, 2005]. FS Date: 6/7/2013

### Photo 3 of 3: UCIP\_SP\_2019\_47049\_33374.jpg



View of exposed pipe section on waterward side.

## **Levee Inspection Report By Mile - Spring 2019**

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	3.56	03/12/2019 03/12/2019	David Julian

LM Start	1.82	Rating **	М	Issue No.		35	
LM End	1.82	Issue Type +	En	Location *			
Supplemental				GPS Latitude/Longitude			
Calegory						End	
Item	DWR UCI	P Field Study		38.20900	)9°	38.209009°	
пеш				-121.65558	85 °	-121.655585 °	
DWR ID 21084							

#### Comment Code

#### Inspector Comment

FS\_ID:47050 DS\_ID:21084 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) through the slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances

FIELD\_STRUCT\_DESC: 2 of 2: 36-inch coated steel drainage discharge pipe through the levee, 7 feet below the crown. Siphon breaker on the waterside (WS) shoulder. Pump on the landside (LS). Pipe exposed along both slopes. Pipe supports at levee shoulders were cutoff walls from a preexisting pipe. Pipes are approximately 36 inches apart. (Plans to replace two pipes with two 36-inch discharge pipes through the levee authorized under Permit No. 15477, 1990 Reclamation District No. 501 [RD0501]). [Additional Reference(s): DWR Levee Log, 2005].

FS Date: 6/7/2013

LM Start	1.82	Rating **	М	Issue No.	35 (cont)
LM End	1.82	Issue Type +	En	Location *	

# Photo 1 of 3: UCIP\_SP\_2019\_47050\_33371.jpg



Overview of levee crown at crossing.

Photo 2 of 3: UCIP\_SP\_2019\_47050\_33372.jpg



Overview of waterward side--3 crossings visible 1-42 inch pipe and 2-36 inch pipes.

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	3.56	03/12/2019 03/12/2019	David Julian

LM Start	1.82	Rating **	М	Issue No.		35 (cont)
LM End	1.82	Issue Type +	En	Location *		
Category	Supplemental			GPS Lat	itud	e/Longitude
Calegory				Start		End
Item	DWR UCI	IP Field Study		38.20900	9°	38.209009°
пеш				-121.65558	5 °	-121.655585 °
DWR ID	21084					·

#### Comment Code

#### Inspector Comment

FS\_ID:47050 DS\_ID:21084 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) through the slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances.

FIELD\_STRUCT\_DESC: 2 of 2: 36-inch coated steel drainage discharge pipe through the levee, 7 feet below the crown. Siphon breaker on the waterside (WS) shoulder. Pump on the landside (LS). Pipe exposed along both slopes. Pipe supports at levee shoulders were cutoff walls from a preexisting pipe. Pipes are approximately 36 inches apart. (Plans to replace two pipes with two 36-inch discharge pipes through the levee authorized under Permit No. 15477, 1990 -

Reclamation District No. 501 [RD0501]). [Additional Reference(s): DWR

Levee Log, 2005]. FS Date: 6/7/2013

#### Photo 3 of 3: UCIP\_SP\_2019\_47050\_33368.jpg



View of 36 inch pipes exposed on waterward side.

## Levee Inspection Report By Mile - Spring 2019

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	3.56	03/12/2019 03/12/2019	David Julian

LM Start	2.44	Rating **	М	Issue No.		36
LM End	2.44	Issue Type +	En	Location *		
Category	Supplemental				itud	e/Longitude
Calegory				Start		End
Item	DWR UC	IP Field Study		38.21339	0 °	38.213390°
пеш				-121.66510	4 °	-121.665104°
DWR ID	21044					

#### Comment Code

#### Inspector Comment

FS\_ID:32537 DS\_ID:21044 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) through the slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances.

FIELD\_STRUCT\_DESC: 14-inch coated steel irrigation siphon pipe through the levee, 6.2 feet below the crown. Siphon breaker on the waterside (WS) shoulder. (Plans to replace a section of an existing 14-inch pipe in the levee authorized under Permit No. 13937, 19 - Lewis Nixon Company). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959, (HLM 2.6)]. FS Date: 6/7/2013

LM Start	2.44	Rating **	М	Issue No.	36 (cont)
LM End	2.44	Issue Type +	En	Location *	



View of levee crown--narrow road.

#### Photo 2 of 3: UCIP\_SP\_2019\_32537\_58990.jpg



Photo taken just downstream of crossing looking at waterward side.

## Levee Inspection Report By Mile - Spring 2019

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	3.56	03/12/2019 03/12/2019	David Julian

LM Start	2.44	Rating **	М	Issue No.		36 (cont)
LM End	2.44	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS La	e/Longitude	
Calegory				Start		End
Item	DWR UC	IP Field Study		38.21339	0°	38.213390°
пеш				-121.66510	4°	-121.665104°
DWR ID	21044					

#### Comment Code

#### Inspector Comment

FS\_ID:32537 DS\_ID:21044 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) through the slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances.

FIELD\_STRUCT\_DESC: 14-inch coated steel irrigation siphon pipe through the levee, 6.2 feet below the crown. Siphon breaker on the waterside (WS) shoulder. (Plans to replace a section of an existing 14-inch pipe in the levee authorized under Permit No. 13937, 19 - Lewis Nixon Company). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959, (HLM 2.6)]. FS Date: 6/7/2013

Photo 3 of 3: UCIP\_SP\_2019\_32537\_58988.jpg



View of exposed section of pipe at waterward toe.

LM Start	2.46	Rating **	М	Issue No.		24
LM End	2.54	Issue Type +	Ma	Location *		LS
Category	Earthen Levee			GPS La	atitud	e/Longitude
Calegory				Start		End
Item	Vegetatio	n		38.2136	15°	38.214440 °
пеш			-121.6654	50°	-121.666360 °	
DWR ID	DWR RD0	501 02 s 201	9 24			

#### Comment Code

V2 : Remove the wild growth other than native grasses from the levee slopes.

#### Inspector Comment

Remove vegetation at the bottom of the slope.

#### Photo 1 of 1: SP\_2019\_RD0501\_170\_24\_20190314\_00045.jpg



View looking upstream at vegetation on the landside slope (Spring 2019).

## Levee Inspection Report By Mile - Spring 2019

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	3.56	03/12/2019 03/12/2019	David Julian

LM Start	2.64	Rating **	М	Issue No.		25	
LM End	2.64	Issue Type +	Ма	Location *		LS	
Category	GPS Latitude/Longitude						
Calegory				Start		End	
Item	Vegetatio	n		38.21572	0°	38.215720	0
пеш			-121.66743	0°	-121.667430	0	
DWR ID DWR_RD0501_02_s _ 2019_25							

#### Comment Code

V2 : Remove the wild growth other than native grasses from the levee slopes.

#### Inspector Comment

Remove blackberries from bottom of levee slope.

#### Photo 1 of 1: SP\_2019\_RD0501\_170\_25\_20190314\_00046.jpg



View of blackberries at the landside toe (Spring 2019).

LM Start	2.69	Rating **	М	Issue No.		22	
LM End	2.69	Issue Type +	Ma	Location *		WS	
Category	Earthen Levee				GPS Latitude/Longitude		
Calegory				Start		End	
Item	Vegetatio	n		38.2163	32 °	38.216332 °	
пеш				-121.6679	45 °	-121.667945 °	
DWR ID	R ID DWR_RD0501_02_f _ 2018_22						

DWR\_RD0501\_02\_f \_ 2018\_22

#### Comment Code

V2 : Remove the wild growth other than native grasses from the levee slopes.

#### Inspector Comment

Remove willows from waterside shoulder.

No Photos

## Levee Inspection Report By Mile - Spring 2019

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	3.56	03/12/2019 03/12/2019	David Julian

LM Start	2.80	Rating **	М	Issue No.		37
LM End	2.80	Issue Type +	En	Location *		
Category Supplemental				GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UC	IP Field Study		38.21757	'9	38.217579°
пеш				-121.66896	3 °	-121.668963 °
DWR ID	21045					

#### Comment Code

#### Inspector Comment

FS\_ID:44872 DS\_ID:21045 EP\_NO: 4733

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) through the waterward slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances.

FIELD\_STRUCT\_DESC: 18-inch steel irrigation siphon pipe through the levee, 4 feet below the crown. Cutoff wall around the pipe at the center of the levee. Siphon breaker on the apex of the pipe on the landside (LS) shoulder. Rock revetment on the waterside (WS) slope. 16-inch pipe welded to the 18-inch pipe near the LS shoulder and extends down the LS slope. Pipe exposed along both slopes. (Plans for installing a siphon pipe through the levee authorized under Permit No. 4733, 1964 - Kenneth R. Stewart). [Additional Reference(s): DWR Levee Log, 2005]. FS Date: 6/7/2013

LM Start	2.80	Rating **	М	Issue No.	37 (cont)
LM End	2.80	Issue Type +	En	Location *	





View of levee crown at crossing.

#### Photo 2 of 3: UCIP\_SP\_2019\_44872\_33393.jpg



Dense vegetation hindered inspection on waterward side.

## Levee Inspection Report By Mile - Spring 2019

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	3.56	03/12/2019 03/12/2019	David Julian

LM Start	2.80	Rating **	М	Issue No.		37 (cont)
LM End	2.80	Issue Type +	En	Location *		
Category Supplemental				GPS Latitude/Longitude		
Calegory			Start		End	
Item	DWR UC	IP Field Study		38.21757	79°	38.217579°
пеш				-121.66896	3°	-121.668963 °
DWR ID	21045					

#### Comment Code

#### Inspector Comment

FS\_ID:44872 DS\_ID:21045 EP\_NO: 4733

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) through the waterward slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances.

FIELD\_STRUCT\_DESC: 18-inch steel irrigation siphon pipe through the levee, 4 feet below the crown. Cutoff wall around the pipe at the center of the levee. Siphon breaker on the apex of the pipe on the landside (LS) shoulder. Rock revetment on the waterside (WS) slope. 16-inch pipe welded to the 18-inch pipe near the LS shoulder and extends down the LS slope. Pipe exposed along both slopes. (Plans for installing a siphon pipe through the levee authorized under Permit No. 4733, 1964 - Kenneth R. Stewart). [Additional Reference(s): DWR Levee Log, 2005]. FS Date: 6/7/2013



Overview of landward side. Pump system located near crown hinge point.

LM Start	2.90	Rating **	A/W	Issue No.	4		
LM End	2.91	Issue Type +	Ma	Location *	LS		
Category Earthen Levee			GPS Latitude/Longitude				
Category				Start		End	
Item	Animal Co	ontrol		38.21889	0°	38.218997 °	
пеш				-121.66993	84 °	-121.669988 °	
DWR ID DWR_RD0501_02_s _ 2012_4							
Comment Code							

A1: Exterminate rodents and backfill and compact or grout burrows.

#### Inspector Comment

No indications of rodent activity visible. Adjacent orchard may attract rodents, so area should be monitored.

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	3.56	03/12/2019 03/12/2019	David Julian

LM Start	3.07	Rating **	М	Issue No.		21		
LM End	3.33	Issue Type +	En	Location *		LS		
Category	Earthen Levee			GPS Latitude/Longitude				
Calegory				Start		End		
Item	Encroachments			38.2211	03 °	38.224732 °		
пеш				-121.6713	48 °	-121.672668 °		
DWR ID	DWR_RD0	501_02_f _ 201	7_21					

Comment Code

## AT : Agricultural tilling

#### Inspector Comment

Agricultural activity has cut into the landside levee toe resulting in a 4-foot tall, near vertical cut at the toe. This may destabilize the slope above. The toe should be reconstructed to the same slope angle as the levee slope above it.



Photo of cut into the levee toe

LM Start	3.07	Rating **	М	Issue No.		38	
LM End	3.07	Issue Type +	En	Location *			
Category	Supplemental Supplemental			GPS Latitude/Longitude			
Category				Start		End	
Item	DWR UC	IP Field Study		38.2210	90°	38.221090 °	
пеш				-121.671384°		-121.671384°	
DWR ID	21046						

# Comment Code

#### Inspector Comment

FS\_ID:19657 DS\_ID:21046 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

FS Date: 8/22/2013

UCIP Comments: Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) through the waterward slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances.

FIELD\_STRUCT\_DESC: 16-inch welded steel irrigation siphon pipe sleeved through a 20-inch coated steel pipe through the levee, 4.7 feet below the crown. Annular space grouted. Siphon breaker on the landside (LS) shoulder. Pipe exposed along both slopes. (Plans to place a new 16-inch welded steel pipe within the old 20-inch siphon authorized under Permit No. 2645, 1957 - Henry and Joseph Passaglia). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959, (HLM 3.3)].

Photo 1 of 3 : UCIP\_SP\_2019\_19657\_33396.jpg



Dense vegetation along the crown hinge point and beginning section of waterward slope.

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	3.56	03/12/2019 03/12/2019	David Julian

LM Start	3.07	Rating **	М	Issue No.		38 (cont)
LM End	3.07	Issue Type +	En	Location *		
Supplemental			GPS Latitude/Longitude			
Calegory	Category			Start		End
Item	DWR UCIP Field Study			38.22109	90°	38.221090°
Item				-121.6713	84 °	-121.671384°
DWR ID	21046					

#### Comment Code

#### Inspector Comment

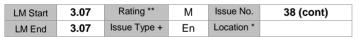
FS\_ID:19657 DS\_ID:21046 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) through the waterward slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances.

FIELD\_STRUCT\_DESC: 16-inch welded steel irrigation siphon pipe sleeved through a 20-inch coated steel pipe through the levee, 4.7 feet below the crown. Annular space grouted. Siphon breaker on the landside (LS) shoulder. Pipe exposed along both slopes. (Plans to place a new 16-inch welded steel pipe within the old 20-inch siphon authorized under Permit No. 2645, 1957 - Henry and Joseph Passaglia). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959, (HLM 3.3)].

FS Date: 8/22/2013



## Photo 2 of 3 : UCIP\_SP\_2019\_19657\_33400.jpg



Dense vegetation along the upper portion of the waterward slope prevents proper inspection of crossing.

#### Photo 3 of 3: UCIP\_SP\_2019\_19657\_33397.jpg



Overview of pipe along waterward side.

## **Levee Inspection Report By Mile - Spring 2019**

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	3.56	03/12/2019 03/12/2019	David Julian

LM Start	3.41	Rating **	М	Issue No.		16
LM End	3.48	Issue Type +	Ma	Location *		LS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory				Start		End
Item	Trim / Thi	n Trees		38.2258	23 °	38.226847°
пеш			-121.672837 °		-121.673027°	
DWR ID	DWR_RD0	501_02_s _ 201	2_16			·
		Comn	nent Cod	le		
T1: Trim t	rees to at l	east five feet	above g	round level.		
		Inspecto	or Comm	nent		
Trim up the trees on the landside slope.						

No Photos

#### **Unit Cover Sheet**

**Spring 2019 Levee Inspection Results** 

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles
Unit No. 03 Miner Slough	Left	7.71

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)				
Date of Inspection	3/12/2019 - 3/12/2019			
DWR Inspector	David Julian			
Accompanied By	Nick Zepeda Reclamation District 501			

#### **Summer & Winter Inspections**

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

#### http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

## Levee Inspection Report By Mile - Spring 2019

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Miner Slough	Left	7.71	03/12/2019 03/12/2019	David Julian

LM Start	0.55	Rating **	М	Issue No.		44
LM End	0.60	Issue Type +	Ma	Location *		WS
Category	Earthen Levee			GPS Latitude/Longitude		
Calegory			Start		End	
Item	Vegetatio	n		38.23389	2 °	38.234412 °
пеш			-121.66620	3°	-121.665627 °	
DWR ID	DWR_RD0	501_03_f _ 201	8_44			·

#### Comment Code

V2 : Remove the wild growth other than native grasses from the levee slopes.

#### Inspector Comment



View looking upstream of new willow growth on the waterside shoulder (November 2018).

LM Start	0.57	Rating **	М	Issue No.		Issue No.		27
LM End	0.57	Issue Type +	Ма	Location *		LS		
Category	Earthen Levee			GPS Latitude/Longitude				
Calegory			Start		End			
Item	Vegetatio	n		38.2341	02 °	38.234102°		
пеш			-121.6659	32 °	-121.665932 °			
DWR ID	DWR RD0	501 03 s 201	9 27					

#### Comment Code

V2 : Remove the wild growth other than native grasses from the levee slopes.

#### Inspector Comment

Remove vegetation from the landside slope.

#### Photo 1 of 1: SP\_2019\_RD0501\_171\_27\_20190314\_00081.jpg



View of vegetation on the landside slope (Spring 2019).

## Levee Inspection Report By Mile - Spring 2019

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Miner Slough	Left	7.71	03/12/2019 03/12/2019	David Julian

LM Start	0.62	Rating **	М	Issue No.		51
LM End	0.62	Issue Type +	En	Location *		
Category	Suppleme	ental	GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR UC	IP Field Study		38.23467	9°	38.234679°
пеш				-121.66541	7 °	-121.665417°
DWR ID	21065					

#### Comment Code

#### Inspector Comment

FS\_ID:44873 DS\_ID:21065 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pump operating during inspection. Need to determine owner. Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) through the waterward slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances.

FIELD\_STRUCT\_DESC: 14-inch steel irrigation discharge pipe through the levee, 6.3 feet below the crown. Siphon breaker on the landside (LS) slope. Pipe exposed on both slopes. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959, (HLM 0.7), 16-inch pipe referenced].

FS Date: 6/7/2013

LM Start	0.62	Rating **	М	Issue No.	51 (cont)
LM End	0.62	Issue Type +	En	Location *	

## Photo 1 of 3: UCIP\_SP\_2019\_44873\_33405.jpg



Overview of waterward side. Dense vegetation limits proper inspection.

Photo 2 of 3: UCIP\_SP\_2019\_44873\_33402.jpg



Conditions of wateward slope--dense vegetation along slope.

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Miner Slough	Left	7.71	03/12/2019 03/12/2019	David Julian

LM Start	0.62	Rating **	М	Issue No.		51 (cont)
LM End	0.62	Issue Type +	En	Location *		
Category	Suppleme	ental	GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR UC	IP Field Study		38.23467	9°	38.234679 °
пеш				-121.66541	7°	-121.665417 °
DWR ID	21065					

### Comment Code

#### Inspector Comment

FS\_ID:44873 DS\_ID:21065 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pump operating during inspection. Need to determine owner. Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) through the waterward slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances.

FIELD\_STRUCT\_DESC: 14-inch steel irrigation discharge pipe through the levee, 6.3 feet below the crown. Siphon breaker on the landside (LS) slope. Pipe exposed on both slopes. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959. (HLM 0.7), 16-inch pipe referenced].

FS Date: 6/7/2013

### Photo 3 of 3: UCIP\_SP\_2019\_44873\_33404.jpg



Overview of landward side--pump sytem, pipe, and standpipe.

LM Start	0.78	Rating **	U	Issue No.		30	
LM End	0.93	Issue Type +	Ma	Location *		WS	
Category	Earthen L	evee		GPS La	titud	e/Longitude	
Category				Start		End	
Item	Vegetatio	n		38.2369	68 °	38.239040	0
item				-121.6650	88 °	-121.664862	0
DWR ID	DWR_RD0	501_03_s _ 201	9_30				

#### Comment Code

 $\ensuremath{\mathsf{V2}}$  : Remove the wild growth other than native grasses from the levee slopes.

#### Inspector Comment

Remove willows and blackberries 20' from crown.

#### Photo 1 of 1: SP\_2019\_RD0501\_171\_30\_20190314\_00082.jpg



View looking upstream at vegetation on the waterside slope (Spring 2019).

## **Levee Inspection Report By Mile - Spring 2019**

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Miner Slough	Left	7.71	03/12/2019 03/12/2019	David Julian

LM Start	0.90	Rating **	U	Issue No.	45		
LM End	0.97	Issue Type +	Ма	Location *	WS		
Category	Earthen L	evee	GPS Latitude/Longitude				
Category				Start		End	
Item	Vegetatio	n		38.23869	95 °	38.239740 °	
item				-121.66485	8°	-121.664782 °	
DWR ID	DWR_RD0	501_03_f _ 201	8_45				
Comment Code							
V2 : Remove the wild growth other than native grasses from the levee							

slopes.

Inspector Comment



View looking upstream at thick vegetation on the waterside slope (November 2018).

LM Start	1.21	Rating **	М	Issue No.		33		
LM End	1.33	Issue Type +	En	Location *		LS		
Category	evee	GPS Latitude/Longitude						
Calegory		Start		End				
Item	Encroach	ments		38.242103°		38.242805 °		
item				-121.661745°		-121.659637 °		
DWR ID	DWR_RD0	501_03_s _ 201	9_33					
		Comn	nent Cod	le				
DT : Ditch								
	Inspector Comment							
Ditch locat	ad at land	Ditch located at landside too						

Ditch located at landside toe.



View looking upstream at ditch on the landside toe (Spring 2019).

## **Levee Inspection Report By Mile - Spring 2019**

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Miner Slough	Left	7.71	03/12/2019 03/12/2019	David Julian

LM Start	1.35	Rating **	М	Issue No.		Issue No.		52
LM End	1.35	Issue Type +	En	Location *				
Category	ental	GPS Latitude/Longitude						
Calegory			Start		End			
Item	DWR UC	IP Field Study		38.2428	79°	38.242879 °		
пеш				-121.6594	50°	-121.659450 °		
DWR ID	21066							

#### Inspector Comment

Comment Code

FS\_ID:44728 DS\_ID:21066 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pipe appears abandoned and if so shoull be done so properly. Wooden walkway to pier in disrepair and a hazard.

FIELD\_STRUCT\_DESC: 12-inch steel irrigation discharge pipe through the levee, 8 feet below the crown. Siphon breaker on the landside (LS) slope. Pump on a pipe structure in the stream. Concrete standpipe and distribution slide gates at the LS toe. 1.5-inch electrical conduit at the same location. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959, (HLM 1.5)].

FS Date: 6/7/2013

LM Start	1.35	Rating **	М	Issue No.	52 (cont)
LM End	1.35	Issue Type +	En	Location *	

### Photo 1 of 2: UCIP\_SP\_2019\_44728\_73924.jpg



Siphon breaker in 24-inch CMP riser on LS slope. Standpipe visible at

#### Photo 2 of 2: UCIP SP 2019 44728 73923.jpg



Pump on wooden pier off WS toe.

## **Levee Inspection Report By Mile - Spring 2019**

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Miner Slough	Left	7.71	03/12/2019 03/12/2019	David Julian

LM Start	1.48	Rating **	Issue No.		28		
LM End	1.48	Issue Type +	Ма	Location *		LS	
Category	Catagoria Earthen Levee				GPS Latitude/Longitude		
Calegory			Start		End		
Item	Trim / Thi	n Trees		38.24429	3°	38.244293 °	
пеш				-121.65784	3°	-121.657843 °	
DWR ID DWR_RD0501_03_f _ 2017_28							

#### Comment Code

T2: Thin trees to allow visibility of the ground and room to flood fight.

#### Inspector Comment

Trim/thin willows to allow inspection and access to landside slope and toe.



Trim/thin willows to allow inspection and access to landside slope and toe.

LM Start	1.56	Rating **	С	Issue No.	29	
LM End	1.56	Issue Type +	Ma	Location *		LS
Earthen Levee				GPS Latitude/Longitude		
Category		Start		End		
Item	Vegetatio	n		38.2454	45°	38.245445 °
пеш				-121.6580	35 °	-121.658035 °
DWR ID DWR_RD0501_03_s _ 2019_29						
Commont Codo						

#### Comment Code

V2 : Remove the wild growth other than native grasses from the levee slopes.

#### Inspector Comment

Remove berry vines at landside toe to allow inspection and access.

No Photos

LM Start	1.70	Rating **	М	Issue No.		46	_
LM End	1.70	Issue Type +	En	Location *		LS	_
Category Earthen Levee				GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Encroach	ments		38.247218°		38.247218	0
пеш	item				17°	-121.658217	0
DWR ID DWR_RD0501_03_f _ 2018_46							
	Comment Code						

#### FE: Fence

#### Inspector Comment

Fence located on landside toe does not have permit.

#### Photo 1 of 1: SP\_2019\_RD0501\_171\_46\_20190311\_00013.jpg



View of unpermitted fence on the landside toe (November 2018).

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Miner Slough	Left	7.71	03/12/2019 03/12/2019	David Julian

LM Start	1.88	Rating **	М	Issue No.		53	_
LM End	1.88	Issue Type +	En	Location *			
Category				GPS Latitude/Longitude			
Calegory	gory			Start		End	
Item	DWR UC	IP Field Study		38.24936	2°	38.249362	0
пеш				-121.65635	7 °	-121.656357	0
DWR ID	21068						

## Comment Code

#### Inspector Comment

FS\_ID:43503 DS\_ID:21068 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Authorized or Unauthorized? Need permit authorizing work. Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) through the slope on both waterward and landward side. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances.

FIELD\_STRUCT\_DESC: 10-inch steel irrigation discharge pipe through the levee, 6.3 feet below the crown. Pump, gate valve, and switch box on the waterside (WS) slope. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959, (HLM 2.0), reported as 3.8 feet below the crown].

FS Date: 6/7/2013

LM Start	1.88	Rating **	М	Issue No.	53 (cont)
LM End	1.88	Issue Type +	En	Location *	

#### Photo 1 of 2: UCIP\_SP\_2019\_43503\_33410.jpg



Overview of waterward side. Pipe is completely obstructed by dense vegetation.

#### Photo 2 of 2: UCIP\_SP\_2019\_43503\_33411.jpg



Overview of landward side. Pipe is visible however dense vegetation limits proper inspection.

# Levee Inspection Report By Mile - Spring 2019

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Miner Slough	Left	7.71	03/12/2019 03/12/2019	David Julian

LM Start	2.20	Rating **	М	Issue No.	31	
LM End	2.20	Issue Type +	En	Location *	LS	
Category	evee	GPS Latitude/Longitude				
Calegory			Start		End	
Item	Vegetatio	n		38.25388	35 °	38.253885 °
пеш				-121.65535	3°	-121.655353 °
DWR ID DWR_RD0501_03_f _ 2018_31						
Comment Code						

V6: Landscaping

#### Inspector Comment

Remove large cactus at landside toe to allow inspection and access.

LM Start	2.20	Rating **	М	Issue No.	31 (cont)
LM End	2.20	Issue Type +	En	Location *	LS

# Photo 1 of 2 : SP\_2019\_RD0501\_171\_31\_20190311\_00003.jpg



Photo of large cactus at landside toe

#### Photo 2 of 2: SP\_2019\_RD0501\_171\_31\_20190311\_00004.jpg



Cactus at toe should be removed.

LM Start	2.44	Rating **	С	Issue No.	32		
LM End	2.44	Issue Type +	Ма	Location *	LS		
Category	Earthen Levee			GPS Latitude/Longitude			
Calegory				Start		End	
Vegetation			38.2550	70°	38.255070	0	
Item				-121.6516	30°	-121.651630	0
DWR ID	DWR_RD0						
Comment Code							

V2 : Remove the wild growth other than native grasses from the levee slopes.

#### Inspector Comment

Remove thick berry vines at landside toe to allow inspection and access.

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

## Levee Inspection Report By Mile - Spring 2019

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Miner Slough	Left	7.71	03/12/2019 03/12/2019	David Julian

LM Start	2.52	Rating **	М	Issue No.		54
LM End	2.52	Issue Type +	En	Location *		
Category				GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UC	IP Field Study		38.25625	5°	38.256255 °
пеш				-121.65155	ı°	-121.651551 °
DWR ID	21047					

# Comment Code

#### Inspector Comment

FS\_ID:18945 DS\_ID:21047 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Need to determine owner of structure. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtances.

FIELD\_STRUCT\_DESC: 16-inch steel irrigation siphon pipe through the levee 3.3 feet below the crown. Gate valve and switch box on the

levee, 3.3 feet below the crown. Gate valve and switch box on the landside (LS) slope. Pipe exposed on both slopes. Riprap on the waterside (WS). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959, (HLM 2.7)]. FS Date: 6/7/2013

 LM Start
 2.52
 Rating \*\*
 M
 Issue No.
 54 (cont)

 LM End
 2.52
 Issue Type +
 En
 Location \*

## Photo 1 of 3: UCIP\_SP\_2019\_18945\_31607.jpg



Overview of levee crown at crossing.

#### Photo 2 of 3: UCIP\_SP\_2019\_18945\_31609.jpg



Overview of waterward side. Pipe is mostly buried through waterward side.

## Levee Inspection Report By Mile - Spring 2019

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Miner Slough	Left	7.71	03/12/2019 03/12/2019	David Julian

LM Start	2.52	Rating **	М	Issue No.		54 (cont)	
LM End	2.52	Issue Type +	En	Location *			
Supplemental Supplemental				GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UC	IP Field Study		38.2562	55 °	38.256255	٥
пеш				-121.6515	51 °	-121.651551	0
DWR ID	21047						

#### Comment Code

#### Inspector Comment

FS\_ID:18945 DS\_ID:21047 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Need to determine owner of structure. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtances.

FIELD\_STRUCT\_DESC: 16-inch steel irrigation siphon pipe through the levee, 3.3 feet below the crown. Gate valve and switch box on the landside (LS) slope. Pipe exposed on both slopes. Riprap on the waterside (WS). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959, (HLM 2.7)].

FS Date: 6/7/2013

#### Photo 3 of 3: UCIP\_SP\_2019\_18945\_31608.jpg



Exposed section of pipe located on waterward side.

LM Start	2.95	Rating **	С	Issue No.		47	
LM End	3.03	Issue Type +	Ma	Location *	LS		
Catagory	Earthen L	evee		GPS La	atitud	e/Longitude	
Category				Start		End	
Item	Vegetatio	n		38.2616	17°	38.261897	0
item				-121.6502	20°	-121.648820	0
DWR ID	DWR_RD0	501_03_f _ 201	8_47				

#### Comment Code

V2 : Remove the wild growth other than native grasses from the levee slopes.

#### Inspector Comment

Remove willows from landside shoulder.

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS : Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Miner Slough	Left	7.71	03/12/2019 03/12/2019	David Julian

LM Start	2.98	Rating **	С	Issue No.	48		
LM End	3.02	Issue Type +	Ma	Location *	WS		
Category	Earthen L		GPS Latitude/Longitude				
Calegory			Start		End		
Vegetation				38.26163	80°	38.261800 °	
пеш				-121.64970	)2 °	-121.649017 °	
DWR ID	DWR_RD0501_03_f _ 2018_48						
Comment Code							

V2 : Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment

Remove willows from waterside shoulder.

No Photos

LM Start	3.51 Rating ** M		М	Issue No.		55	
LM End	3.51	Issue Type +	En	Location *			
Category	Suppleme	ental		GPS La	titud	e/Longitude	
Calegory				Start		End	
Item	DWR UC	IP Field Study		38.26618	87 °	38.266187	•
item				-121.64190	9°	-121.641909	٥
DWR ID	21048						

#### Comment Code

#### Inspector Comment

FS\_ID:32538 DS\_ID:21048 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) through the waterward slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Need to find owner of crossing and determine if permit number is available.

FIELD\_STRUCT\_DESC: 12-inch steel irrigation discharge pipe through the levee, 5 feet below the crown. Pump on a pile structure in the stream. Service pole on the landside (LS) slope. Concrete standpipe at the LS toe. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959, (HLM 3.8)].

FS Date: 6/7/2013

## Photo 1 of 3: UCIP\_SP\_2019\_32538\_58994.jpg



Photo taken downstream of structure.

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Miner Slough	Left	7.71	03/12/2019 03/12/2019	David Julian

LM Start	3.51	Rating **	М	Issue No.	55 (cont)			
LM End	3.51	Issue Type +	En	Location *				
Category	Suppleme	ental	GPS Latitude/Longitude					
Calegory	Calegory					End		
Item	DWR UC	IP Field Study		38.26618	7°	38.266187°		
пеш				-121.64190	9°	-121.641909°		
DWR ID 21048								
		Comm	nent Cod	le				

# Inspector Comment

FS\_ID:32538 DS\_ID:21048 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) through the waterward slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Need to find owner of crossing and determine if permit number is available.

FIELD\_STRUCT\_DESC: 12-inch steel irrigation discharge pipe through the levee, 5 feet below the crown. Pump on a pile structure in the stream. Service pole on the landside (LS) slope. Concrete standpipe at the LS toe. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959, (HLM 3.8)].

FS Date: 6/7/2013

LM Start	3.51	Rating **	М	Issue No.	55 (cont)
LM End	3.51	Issue Type +	En	Location *	

#### Photo 2 of 3: UCIP\_SP\_2019\_32538\_58999.jpg



View of waterward side. Dense vegetation throughout waterward side. Walkway visible and support piles.

#### Photo 3 of 3: UCIP\_SP\_2019\_32538\_58998.jpg



View of landward side--section of pipe exposed and Standpipe.

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Miner Slough	Left	7.71	03/12/2019 03/12/2019	David Julian

LM Start	3.62	Rating **	М	Issue No.		56
LM End	3.62	Issue Type +	En	Location *		
Category	Supplemental					le/Longitude
Calegory	Calegory					End
Item	DWR UC	IP Field Study	38.26749	00°	38.267490 °	
пеш		-121.64074	9°	-121.640749 °		
DWR ID	21049					

# Inspector Comment

Comment Code

FS\_ID:46768 DS\_ID:21049 EP\_NO: 1557

Repair Type: Non-Urgent Crossing Status: Found

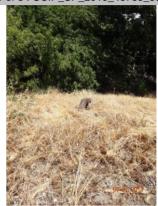
UCIP Comments: Crossing appears abandoned--wooden platform structure appears to be abandoned on waterward side. Small hole underneath pipe on landward side--unable to determine cause (rodent/pipe leak) Need to find owner of crossing to determine status. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtances.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 6-inch irrigation discharge pipe of an unknown material through the levee, 2.5 feet below the crown. Pump in a pump house on the waterside (WS) slope. (Plans for the construction of two irrigation pumping plants, about 500 feet apart, and 6-inch discharge pipes through the levee authorized under Permit No. 1557, 1951 - Poultry Producers of Central California). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959, (HLM 3.9)].

FS Date: 6/7/2013

LM Start	3.62	Rating **	М	Issue No.	56 (cont)
LM End	3.62	Issue Type +	En	Location *	





View of landward side showing a small section of pipe exposed.

Photo 2 of 3: UCIP\_SP\_2019\_46768\_30381.jpg



Burrow activity visible underneath pipe alignment.

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Miner Slough	Left	7.71	03/12/2019 03/12/2019	David Julian

LM Start	3.62	Rating **	М	Issue No.		56 (cont)		
LM End	3.62	Issue Type +	En	Location *				
Catagony	Category Supplemental				GPS Latitude/Longitud			
Calegory						End		
Item	DWR UC	IP Field Study		38.26749	o°	38.267490 °		
пеш				-121.64074	e e	-121.640749 °		
DWR ID	21049							

# Comment Code

#### Inspector Comment

FS\_ID:46768 DS\_ID:21049 EP\_NO: 1557

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Crossing appears abandoned--wooden platform structure appears to be abandoned on waterward side. Small hole underneath pipe on landward side--unable to determine cause (rodent/pipe leak) Need to find owner of crossing to determine status. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtances.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 6-inch irrigation discharge pipe of an unknown material through the levee, 2.5 feet below the crown. Pump in a pump house on the waterside (WS) slope. (Plans for the construction of two irrigation pumping plants, about 500 feet apart, and 6-inch discharge pipes through the levee authorized under Permit No. 1557, 1951 - Poultry Producers of Central California). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959, (HLM 3.9)].

FS Date: 6/7/2013

## Photo 3 of 3: UCIP\_SP\_2019\_46768\_30380.jpg



Overview of waterward side with limited access to structure.

LM Start	3.62	Rating **	М	Issue No.		22				
LM End	3.63	Issue Type +	Ма	Location *	LS					
Category Earthen Levee				GPS Latitude/Longitude						
Category				Start		End				
Item	Trim / Thi	n Trees		38.2674	85 °	38.267578	0			
Item				-121.6406	67°	-121.640507	0			
DWR ID DWR_RD0501_03_s _ 2012_22										
	Comment Code									

T2: Thin trees to allow visibility of the ground and room to flood fight.

Inspector Comment

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

## Levee Inspection Report By Mile - Spring 2019

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Miner Slough	Left	7.71	03/12/2019 03/12/2019	David Julian

LM Start	3.65	Rating **	М	Issue No.		57		
LM End	3.65	Issue Type +	En	Location *				
Category	ental	GPS Latitude/Longitude						
Calegory	Calegory					End		
Item	DWR UCI	38.26781	8 °	38.267818°				
item				-121.64052	1°	-121.640521 °		
DWR ID 21050								

#### Comment Code

#### Inspector Comment

FS\_ID:32540 DS\_ID:21050 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Unable to properly inspect structure--limited access. Also unable to determine if structure is still in use. Levee logs indicate this crossing is abandoned. If structre is no longer used-how to prevent water from flowing through levee during flood season. If structure no longer in use owner will need to coordinate with CVFPB.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 66-inch by 66-inch reinforced concrete gravity drainage tunnel through the levee, 6.5 feet below the crown. [Additional Reference(s): DWR Levee Log, 2005].

FS Date: 6/7/2013

LM Start	3.65	Rating ** M		Issue No.	57 (cont)
LM End	3.65	Issue Type +	En	Location *	



View of narrow levee crown.

#### Photo 2 of 3: UCIP\_SP\_2019\_32540\_59006.jpg



View of large building structure located on landward side.

## Levee Inspection Report By Mile - Spring 2019

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Miner Slough	Left	7.71	03/12/2019 03/12/2019	David Julian

LM Start	3.65	Rating **	М	Issue No.		57 (cont)
LM End	3.65	Issue Type +	En	Location *		
Category	Suppleme	GPS Latitude/Longitude				
Calegory			Start		End	
Item	DWR UC	IP Field Study		38.26781	8 °	38.267818
пеш				-121.64052	1 °	-121.640521
DWR ID	21050					

#### Comment Code

#### Inspector Comment

FS\_ID:32540 DS\_ID:21050 EP\_NO: N/A

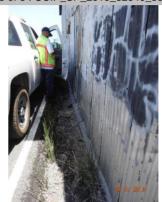
Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Unable to properly inspect structure--limited access. Also unable to determine if structure is still in use. Levee logs indicate this crossing is abandoned. If structre is no longer used-how to prevent water from flowing through levee during flood season. If structure no longer in use owner will need to coordinate with CVFPB.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 66-inch by 66-inch reinforced concrete gravity drainage tunnel through the levee, 6.5 feet below the crown. [Additional Reference(s): DWR Levee Log, 2005].

FS Date: 6/7/2013

## Photo 3 of 3: UCIP\_SP\_2019\_32540\_59003.jpg



View of structure on landward side.

## Levee Inspection Report By Mile - Spring 2019

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Miner Slough	Left	7.71	03/12/2019 03/12/2019	David Julian

LM Start	3.66	Rating **	U	Issue No.		58
LM End	3.66	Issue Type +	En	Location *		
Category		GPS Lat	itud	e/Longitude		
Calegory				Start		End
Item	DWR UC	IP Field Study		38.26800	3°	38.268003 °
пеш				-121.64047	4 °	-121.640474 °
DWR ID	21051					

### Comment Code

#### Inspector Comment

FS\_ID:53355 DS\_ID:21051 EP\_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 07/24/2018 Same as last inspection; appears abandoned. Keeping Urgent due to levee integrity issues with open tunnel and possibility for erosion to levee (D. Sanoski - DWR UCIP).8/22/2016 Unable to locate due to high traffic area and narrow levee crown. Assume condition is same as previous inspection. CVFPB should review this crossing to determine if WS needs to be capped off for flood season. (DWR UCIP - omagana)4/23/2015 Concrete deteriorating. Pipe open on both ends. Appears abandoned and if so should be done so properly. (DWR UCIP - omagana)

FIELD\_STRUCT\_DESC: \*ABANDONED\* 66-inch by 72-inch reinforced concrete drainage tunnel through the levee, 2.5 feet below the crown. [Additional Reference(s): DWR Levee Log, 2005].

FS Date: 7/24/2018 11:12:00 AM

LM Start	3.66	Rating **	U	Issue No.	58 (cont)
LM End	3.66	Issue Type +	En	Location *	



Building on LS shoulder prevents access to LS of levee.

### Photo 2 of 3: UCIP\_SP\_2019\_53355\_73941.jpg



Concrete tunnel and wingwalls visible on WS slope.

## Levee Inspection Report By Mile - Spring 2019

# Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Miner Slough	Left	7.71	03/12/2019 03/12/2019	David Julian

LM Start	3.66	Rating **	U	Issue No.		58 (cont)
LM End	3.66	Issue Type +	En	Location *		
Category	Suppleme	ental	GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR UC	IP Field Study		38.26800	3 °	38.268003 °
пеш				-121.64047	'4 °	-121.640474 °
DWR ID	21051					

#### Comment Code

#### Inspector Comment

FS\_ID:53355 DS\_ID:21051 EP\_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 07/24/2018 Same as last inspection; appears abandoned. Keeping Urgent due to levee integrity issues with open tunnel and possibility for erosion to levee (D. Sanoski - DWR UCIP).8/22/2016 Unable to locate due to high traffic area and narrow levee crown. Assume condition is same as previous inspection. CVFPB should review this crossing to determine if WS needs to be capped off for flood season. (DWR UCIP - omagana)4/23/2015 Concrete deteriorating. Pipe open on both ends. Appears abandoned and if so should be done so properly. (DWR UCIP - omagana)

FIELD\_STRUCT\_DESC: \*ABANDONED\* 66-inch by 72-inch reinforced concrete drainage tunnel through the levee, 2.5 feet below the crown. [Additional Reference(s): DWR Levee Log, 2005].

FS Date: 7/24/2018 11:12:00 AM



Tunnel open on both ends.

LM Start	3.68	Rating **	М	Issue No.		3	
LM End	3.68	Issue Type +	Ma	Location *	LS		
Category	Cotogon Earthen Levee					le/Longitude	
Calegory	Category					End	
Item	Trim / Thi	n Trees		38.268218 °		38.268218 °	
пеш			-121.640418 ° -121.6404				
DWR ID DWR_RD0501_03_f _ 2017_3							
Comment Code							

T1: Trim trees to at least five feet above ground level.

Inspector Comment

No Photos

Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

### **Levee Inspection Report By Mile - Spring 2019**

## Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Miner Slough	Left	7.71	03/12/2019 03/12/2019	David Julian

LM Start	3.68	Rating **	М	Issue No.		59		
LM End	3.68	Issue Type +	En	Location *				
Category	Supplemental				GPS Latitude/Longitude			
Category				Start		End		
Item	DWR UC	IP Field Study		38.26827	8°	38.268278		
пеш				-121.64037	7°	-121.640377		
DWR ID	21052							

# Comment Code

#### Inspector Comment

FS\_ID:19662 DS\_ID:21052 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Need to abandon structure properly--contact owner. Also if crossing is still in use--recommend removing vegetation along pipe alignment to conduct proper inspection of structure and

appurtenances

FIELD\_STRUCT\_DESC: 36-inch grain conveyor culvert of an unknown material through the levee, 5 feet below the crown. Grain loading auger sleeved through the culvert. Grain loading system on a platform in the channel. (Plans for installing a 36-inch culvert to be used for housing a 14-inch screw-type bulk grain conveyor through the levee authorized under Permit No. 1503, 1959 - Bay Cities Transportation Company). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1950, (HLM 4.0)].

FS Date: 6/7/2013

LM Start	3.68	Rating **	М	Issue No.	59 (cont)
LM End	3.68	Issue Type +	En	Location *	

# Photo 1 of 3: UCIP\_SP\_2019\_19662\_33420.jpg



View of waterward side. Pipe visible through dense vegetation.

### Photo 2 of 3: UCIP\_SP\_2019\_19662\_33418.jpg



Dense vegetation along the pipe alignment and throughout waterward slope.

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Miner Slough	Left	7.71	03/12/2019 03/12/2019	David Julian

LM Start	3.68	Rating **	М	Issue No.		59 (cont)		
LM End	3.68	Issue Type +	En	Location *				
Category	Supplemental				GPS Latitude/Longitude			
Calegory	Category			Start		End		
Item	DWR UC	IP Field Study		38.26827	8 °	38.268278	0	
пеш				-121.64037	7 °	-121.640377	0	
DWR ID	21052							

# Comment Code

#### Inspector Comment

FS\_ID:19662 DS\_ID:21052 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Need to abandon structure properly--contact owner. Also if crossing is still in use--recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances.

FİELD\_STRUCT\_DESC: 36-inch grain conveyor culvert of an unknown material through the levee, 5 feet below the crown. Grain loading auger sleeved through the culvert. Grain loading system on a platform in the channel. (Plans for installing a 36-inch culvert to be used for housing a 14-inch screw-type bulk grain conveyor through the levee authorized under Permit No. 1503, 1959 - Bay Cities Transportation Company). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1950, (HLM 4.0)].

FS Date: 6/7/2013

#### Photo 3 of 3: UCIP\_SP\_2019\_19662\_33419.jpg



Reminince of grain loading auger located on waterward slope.

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Miner Slough	Left	7.71	03/12/2019 03/12/2019	David Julian

LM Start	3.70	Rating **	М	Issue No.		60	
LM End	3.70	Issue Type +	En	Location *			
Category	Supplemental				GPS Latitude/Longitude		
Calegory	Category			Start		End	
Item	DWR UC	IP Field Study		38.26857	o°	38.268570°	
пеш				-121.64040	3°	-121.640408°	
DWR ID	21053						

#### Comment Code

#### Inspector Comment

FS\_ID:43524 DS\_ID:21053 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) through the waterward slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances.

FIELD\_STRUCT\_DESC: 6-inch irrigation discharge pipe of an unknown material through the levee, 2.5 feet below the crown. Pump in a pump house on the waterside (WS) slope. (Plans for the construction of two irrigation pumping plants, about 500 feet apart, and 6-inch discharge pipes through the levee authorized under Permit No. 1557, 1951 - Poultry Producers of Central California). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959, (HLM 4.0)].

FS Date: 6/7/2013

LM Start	3.70	Rating **	М	Issue No.	60 (cont)
LM End	3.70	Issue Type +	En	Location *	

## Photo 1 of 3: UCIP\_SP\_2019\_43524\_33425.jpg



View of waterward side. Dense vegetation limits inspections. Signs of structure visible highlighted by red box.

### Photo 2 of 3: UCIP\_SP\_2019\_43524\_33424.jpg



View of landward side. Pipe visible.

## **Levee Inspection Report By Mile - Spring 2019**

## Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Miner Slough	Left	7.71	03/12/2019 03/12/2019	David Julian

LM Start	3.70	Rating **	М	Issue No.		60 (cont)
LM End	3.70	Issue Type +	En	Location *		
Category	Suppleme	ental	GPS Latitude/Longitud			
Calegory	or y			Start		End
Item	DWR UC	IP Field Study		38.26857	0 °	38.268570 °
пеш				-121.64040	8°	-121.640408 °
DWR ID	21053					

#### Comment Code

#### Inspector Comment

FS\_ID:43524 DS\_ID:21053 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) through the waterward slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances.

FIELD\_STRUCT\_DESC: 6-inch irrigation discharge pipe of an unknown material through the levee, 2.5 feet below the crown. Pump in a pump house on the waterside (WS) slope. (Plans for the construction of two irrigation pumping plants, about 500 feet apart, and 6-inch discharge pipes through the levee authorized under Permit No. 1557, 1951 - Poultry Producers of Central California). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959, (HLM 4.0)].

FS Date: 6/7/2013

Photo 3 of 3: UCIP\_SP\_2019\_43524\_33423.jpg



Close up of pipe along landward side.

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Miner Slough	Left	7.71	03/12/2019 03/12/2019	David Julian

LM Start	4.30	Rating **	М	Issue No.		61		
LM End	4.30	Issue Type +	En	Location *				
Category	Supplemental				GPS Latitude/Longitude			
Calegory	Category			Start		End		
Item	DWR UC	IP Field Study		38.27586	32 °	38.275862 °		
пеш				-121.63870	)9°	-121.638709°		
DWR ID	21069							

#### Comment Code

#### Inspector Comment

FS\_ID:44876 DS\_ID:21069 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Damage to levee shoulder. Crossing appears to be still be in use--need to contact owner to inform about maintenance issues. Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) along the waterward and landward slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances.

FIELD\_STRUCT\_DESC: 18-inch steel irrigation discharge pipe sleeved through a 24-inch pipe of an unknown material through the levee, 6.5 feet below the crown. Cutoff wall around the pipe at the waterside (WS) shoulder. Siphon breaker on the apex of the pipe at the landside (LS) shoulder. Pump in a pump house on the LS slope. (Plans for an 18-inch steel pipe to be sleeved through the 24-inch pipe with annular space grouted authorized under Permit No. 2496, 1957 - Reclamation District No. 501 [RD0501]). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959, (HLM 4.6)]. FS Date: 6/7/2013

 LM Start
 4.30
 Rating \*\*
 M
 Issue No.
 61 (cont)

 LM End
 4.30
 Issue Type +
 En
 Location \*

## Photo 1 of 3: UCIP\_SP\_2019\_44876\_33427.jpg



Line cracks along crown near crown hinge point on waterward side.

#### Photo 2 of 3: UCIP\_SP\_2019\_44876\_33428.jpg



View of waterward slope. Dense vegetation along slope.

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Miner Slough	Left	7.71	03/12/2019 03/12/2019	David Julian

LM Start	4.30	Rating **	М	Issue No.		61 (cont)	
LM End	4.30	Issue Type +	En	Location *			
Catagony	Category Supplemental				GPS Latitude/Longitude		
Calegory				Start		End	
Item	DWR UC	IP Field Study		38.27586	62 °	38.275862 °	
пеш				-121.63870	)9°	-121.638709°	
DWR ID	21069						

## Comment Code

## Inspector Comment

FS\_ID:44876 DS\_ID:21069 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Damage to levee shoulder. Crossing appears to be still be in use--need to contact owner to inform about maintenance issues. Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) along the waterward and landward slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances.

FIELD\_STRUCT\_DESC: 18-inch steel irrigation discharge pipe sleeved through a 24-inch pipe of an unknown material through the levee, 6.5 feet below the crown. Cutoff wall around the pipe at the waterside (WS) shoulder. Siphon breaker on the apex of the pipe at the landside (LS) shoulder. Pump in a pump house on the LS slope. (Plans for an 18-inch steel pipe to be sleeved through the 24-inch pipe with annular space grouted authorized under Permit No. 2496, 1957 - Reclamation District No. 501 [RD0501]). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959, (HLM 4.6)].

FS Date: 6/7/2013

Photo 3 of 3: UCIP\_SP\_2019\_44876\_33430.jpg



View of landward side. Dry vegetation covers landward slope. Pump system located on landward slope.

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Miner Slough	Left	7.71	03/12/2019 03/12/2019	David Julian

LM Start	4.31	Rating **	М	Issue No.		62
LM End	4.31	Issue Type +	En	Location *		
Category Supplemental			GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR UC	IP Field Study		38.27595	5°	38.275955°
пеш				-121.63862	3°	-121.638626°
DWR ID	21107					

## Comment Code

## Inspector Comment

FS\_ID:44746 DS\_ID:21107 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: Need to verify type of abandonment.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 10-inch irrigation discharge pipe of an unknown material through the levee, 4.8 feet below the crown. 34-inch concrete standpipe on the landside (LS) toe. 10-inch hole in the standpipe where the abandoned pipe once connected. [Additional Reference(s): USACE Sacramento O&M Manual 105, April 1959, (HLM 4.6)].

1959, (HLM 4.6)]. FS Date: 4/23/2015

LM Start	4.31	Rating **	М	Issue No.	62 (cont)
LM End	4.31	Issue Type +	En	Location *	

## Photo 1 of 2: UCIP\_SP\_2019\_44746\_73944.jpg



34-inch diameter concrete standpipe at LS toe.

## Photo 2 of 2: UCIP\_SP\_2019\_44746\_73943.jpg



10-inch diameter hole cut in side of standpipe where pipe once was installed.

## **Levee Inspection Report By Mile - Spring 2019**

## Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Miner Slough	Left	7.71	03/12/2019 03/12/2019	David Julian

LM Start	4.47	Rating **	М	Issue No.		34	
LM End	4.80	Issue Type +	Ma	Location *		LS	
Category Earthen Levee			GPS Latitude/Longitude				
Calegory		Start		End			
Item	Vegetatio	n		38.2779	18°	38.281507°	
пеш				-121.6376	70°	-121.641595 °	
DWR ID DWR_RD0501_03_f _ 2017_34							
Comment Code							

V2 : Remove the wild growth other than native grasses from the levee slopes.

### Inspector Comment

Remove berry vines on landside slope and toe to allow inspection and access.

## Photo 1 of 1: SP\_2019\_RD0501\_171\_34\_20190311\_00005.jpg



Photo of berry vines on landside slope and toe

LM Start	4.75	Rating **	M	Issue No.		Issue No.		63
LM End	4.75	Issue Type +	En	Location *				
Category	Suppleme	ıpplemental			GPS Latitude/Longitude			
Calegory				Start		End		
Item	DWR UC	IP Field Study		38.2810	11 °	38.281041 °		
пеш				-121.64090	)4 °	-121.640904 °		
DWR ID	21071							

## Comment Code

## Inspector Comment

FS\_ID:32541 DS\_ID:21071 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: --Contact owner--Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) along the waterward and landward slopes. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtances. Walkway and siphon breaker not found.

FIELD\_STRUCT\_DESC: 12-inch reinforced concrete irrigation discharge pipe through the levee, 2.5 feet below the crown. Cutoff wall around the pipe at the center of the levee. Siphon breaker at the apex of the pipe on the shoulder. Pump on a pile structure in the stream. Walkway access to pump. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959, (HLM 5.1)]. FS Date: 6/7/2013

Photo 1 of 2: UCIP\_SP\_2019\_32541\_59008.jpg



View of waterward side. Pump located on pile structure in stream.

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Miner Slough	Left	7.71	03/12/2019 03/12/2019	David Julian

LM Start	4.75	Rating **	М	Issue No.		63 (cont)	
LM End	4.75	Issue Type +	En	Location *			
Category	Supplemental				GPS Latitude/Longitude		
Calegory				Start		End	
Item	DWR UC	IP Field Study		38.28104	1 °	38.281041 °	
пеш				-121.64090	4°	-121.640904 °	
DWR ID	21071						

## Comment Code

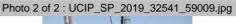
## Inspector Comment

FS\_ID:32541 DS\_ID:21071 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: --Contact owner--Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) along the waterward and landward slopes. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtances. Walkway and siphon breaker not found.

FIELD\_STRUCT\_DESC: 12-inch reinforced concrete irrigation discharge pipe through the levee, 2.5 feet below the crown. Cutoff wall around the pipe at the center of the levee. Siphon breaker at the apex of the pipe on the shoulder. Pump on a pile structure in the stream. Walkway access to pump. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959, (HLM 5.1)].





View of landward side. Power source and control box on landward side.

LM Start	4.81	Rating **	М	Issue No.		35	
LM End	4.81	Issue Type +	En	Location *		LS	
Category	Category Earthen Levee			GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Vegetatio	n		38.2815	33°	38.281533	0
пеш		_		-121.6417	02 °	-121.641702	0
DWR ID	DWR_RD0	501_03_f _ 201	7_35				

## Comment Code

V6: Landscaping

FS Date: 6/7/2013

## Inspector Comment

Remove/thin/trim landside landscaping (grape vines, bushes, trees) to allow inspection and access.

## Photo 1 of 1: SP 2019 RD0501 171 35 20190311 00006.jpg



Photo of landside landscaping (grape vines, bushes, trees)

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Miner Slough	Left	7.71	03/12/2019 03/12/2019	David Julian

LM Start	4.89	Rating **	М	Issue No.		36
LM End	4.89	Issue Type +	Ма	Location *		LS
Category	Earthen L	evee		GPS La	titud	e/Longitude
Calegory				Start		End
Item	Trim / Thi	n Trees		38.28202	28°	38.282028 °
пеш				-121.64306	67°	-121.643067 °
DWR ID	DWR_RD0	501_03_f _ 201	7_36			

No Photos

Comment Code

T2: Thin trees to allow visibility of the ground and room to flood fight.

## Inspector Comment

Trim tree to at least 5 feet above levee slope to allow inspection and access.

LM Start	4.97	Rating **	М	Issue No.		37	
LM End	4.97	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS Latitude/Longitud			
Calegory				Start		End	
Item	Vegetatio	n		38.28319	97 °	38.283197	0
item				-121.64328	37 °	-121.643287	0
DWR ID	DWR_RD0	501_03_s _ 201	9_37				

No Photos

Comment Code

 $\ensuremath{\mathsf{V2}}$  : Remove the wild growth other than native grasses from the levee slopes.

## Inspector Comment

Remove blackberries from landside levee slope.

LM Start	5.11	Rating **	M	Issue No.		38	
LM End	5.11	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Vegetatio	n		38.2851	15 °	38.285115	0
пеш				-121.6432	27 °	-121.643227	0
DWR ID	DWR_RD0	501_03_f _ 201	7_38				

No Photos

Comment Code

V2 : Remove the wild growth other than native grasses from the levee slopes.

## Inspector Comment

Remove thick berry vines from landside slope and toe to allow inspection and access.

* Location		** Rating		+ Issue Type
LS: Land Side	N/A: Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS: Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR · Crown		II · I Inaccentable	AMM · Acceptable but Monitor & Maintain	En · Enforcement

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Miner Slough	Left	7.71	03/12/2019 03/12/2019	David Julian

LM Start	5.43	Rating **	М	Issue No.		64
LM End	5.43	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS Lat	itud	e/Longitude
Calegory				Start		End
Item	DWR UC	IP Field Study		38.28895	1°	38.288951 °
пеш				-121.64422	3°	-121.644223 °
DWR ID	21055					

## Comment Code

## Inspector Comment

FS\_ID:44877 DS\_ID:21055 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pipe abandoned and should be done so properly. FIELD\_STRUCT\_DESC: 10-inch steel irrigation discharge pipe through the levee, 1.8 feet below the crown. Pump on a pile structure in the stream. Pipe exposed on the landside (LS). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959, (HLM 5.9)]. FS Date: 4/23/2015

 LM Start
 5.43
 Rating \*\*
 M
 Issue No.
 64 (cont)

 LM End
 5.43
 Issue Type +
 En
 Location \*



Burried pipe exposed in trench 8-feet downstream from visible pipe.

## Photo 2 of 2: UCIP\_SP\_2019\_44877\_73945.jpg



Cut in buried pipe on LS shoulder.

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Miner Slough	Left	7.71	03/12/2019 03/12/2019	David Julian

LM Start	5.43	Rating **	М	Issue No.		65	
LM End	5.43	Issue Type +	En	Location *			
Category			GPS Latitude/Longitude				
Calegory	Category			Start		End	
Item	DWR UCI	P Field Study		38.28895	0 °	38.288950 °	
пеш				-121.64418	3°	-121.644183 °	
DWR ID 21054							

## Comment Code

## Inspector Comment

FS\_ID:19666 DS\_ID:21054 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Need to find owner and permit number authorizing work. Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) along the waterward and landward slopes. Recommend removing vegetation along pipe alignment to conduct

proper inspection of structure and appurtenances.

FIELD\_STRUCT\_DESC: 12-inch irrigation discharge pipe of an unknown material through the levee, 3 feet below the crown. Pump on a pile structure in the stream. [Additional Reference(s): DWR Levee Log, 2005].

FS Date: 6/7/2013

LM Start	5.43	Rating **	М	Issue No.	65 (cont)
LM End	5.43	Issue Type +	En	Location *	

## Photo 1 of 3: UCIP\_SP\_2019\_19666\_33435.jpg



Overview of waterward side. Control box located near levee crown.

## Photo 2 of 3: UCIP\_SP\_2019\_19666\_33434.jpg



Structure visible through the dense vegetation. Limited access unable to inspect.

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Miner Slough	Left	7.71	03/12/2019 03/12/2019	David Julian

LM Start	5.43	Rating **	М	Issue No.		65 (cont)
LM End	5.43	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UC	IP Field Study		38.28895	o°	38.288950°
пеш				-121.64418	3°	-121.644183°
DWR ID	21054					

## Inspector Comment

Comment Code

FS\_ID:19666 DS\_ID:21054

Repair Type: Non-Urgent Crossing Status: Found

EP\_NO: N/A

UCIP Comments: Need to find owner and permit number authorizing work. Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) along the waterward and landward slopes. Recommend removing vegetation along pipe alignment to conduct

proper inspection of structure and appurtenances.

FIELD\_STRUCT\_DESC: 12-inch irrigation discharge pipe of an unknown material through the levee, 3 feet below the crown. Pump on a pile structure in the stream. [Additional Reference(s): DWR Levee Log, 2005].

FS Date: 6/7/2013

## Photo 3 of 3: UCIP\_SP\_2019\_19666\_33433.jpg



View of pipe on landward side. Dry vegetation covers landward slope.

LM Start	5.61	Rating **	М	Issue No.		49
LM End	5.61	Issue Type +	Ма	Location *		WS
Category	Earthen L	evee	GPS Latitude/Longitude			
Calegory	ry			Start		End
Item	Trim / Thi	n Trees		38.2898	48 °	38.289848 °
пеш				-121.6411	13 °	-121.641113 °
DWR ID	R ID DWR_RD0501_03_s _ 2019_49					

Comment Code
T2 : Thin trees to allow visibility of the ground and room to flood fight.

### Inspector Comment



View of thick tree growth on the waterside slope (November 2018).

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Miner Slough	Left	7.71	03/12/2019 03/12/2019	David Julian

LM Start	5.76	Rating **	М	Issue No.		50
LM End	5.76	Issue Type +	Ма	Location *	WS	
Catagonia Earthen Levee			GPS Latitude/Longitude			
Calegory	Category			Start		End
Item	Trim / Thi	n Trees		38.29006	3°	38.290063 °
item			-1:			-121.638482 °
DWR ID DWR_RD0501_03_f _ 2018_50						
Comment Code						

T2: Thin trees to allow visibility of the ground and room to flood fight.

Inspector Comment

No Photos

LM Start	6.14	Rating **	М	Issue No.		40		
LM End	6.14	Issue Type +	Ma	Location *		WS		
Category	Earthen Levee				GPS Latitude/Longitude			
Calegory	egory					End		
Item	Trim / Thi	n Trees		38.2915	63°	38.291563 °		
пеш			-121.6320	68 °	-121.632068 °			
DWR ID	DWR_RD0	501_03_f _ 201	7_40					

## Comment Code

T1: Trim trees to at least five feet above ground level.

## Inspector Comment

Trim/thin trees on waterside to allow inspection and access.

## Photo 1 of 1: SP\_2019\_RD0501\_171\_40\_20190311\_00008.jpg



Photo of trees on waterside slope

LM Start	6.17	Rating **	М	Issue No.		41		
LM End	6.17	Issue Type +	En	Location *		WS		
Category Earthen Levee				GPS Latitude/Longitude				
Calegory		Start		End				
Item	Vegetatio	n		38.29146	o°	38.291460°		
item		-121.63145	5 °	-121.631455 °				
DWR ID	DWR_RD0	501_03_f _ 201	7_41					

V6 : Landscaping

## Inspector Comment

Comment Code

Trim/thin trees and landscaping to allow inspection and access to levee slope and toe.

## Photo 1 of 1 : SP\_2019\_RD0501\_171\_41\_20190311\_00009.jpg



Photo of trees and landscaping on levee slope and toe

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement

## **Levee Inspection Report By Mile - Spring 2019**

## Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Miner Slough	Left	7.71	03/12/2019 03/12/2019	David Julian

LM Start	6.39	Rating **	М	Issue No.		66		
LM End	6.39	Issue Type +	En	Location *				
Supplemental Supplemental				GPS Latitude/Longitude				
Calegory		Start		End				
Item	DWR UCI	DWR UCIP Field Study			73 °	38.290373 °		
пеш				-121.62763	33 °	-121.627633 °		
DWR ID	21059							

### Comment Code

## Inspector Comment

FS\_ID:32542 DS\_ID:21059 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Need to determine status of crossing. Horizontal and vertical cracks present on stand pipe located on landward side. Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) along the waterward slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances.

FİELD\_STRUCT\_DESC: 12-inch steel irrigation discharge pipe through the levee, 6 feet below the crown. 2-inch electrical conduit of an unknown material through the levee, at an unknown depth. Pump and gate valve on the waterside (WS) slope. Pipe exposed on the landside (LS). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959, (HLM 6.9)]. FS Date: 6/13/2013

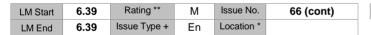


Photo 1 of 3: UCIP\_SP\_2019\_32542\_59022.jpg



Overview of levee crown at crossing.

## Photo 2 of 3: UCIP\_SP\_2019\_32542\_59023.jpg



View of waterward side. Dense vegetation along levee slope.

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Miner Slough	Left	7.71	03/12/2019 03/12/2019	David Julian

LM Start	6.39	Rating **	М	Issue No.		Issue No. 60		66 (cont)
LM End	6.39	Issue Type +	En	Location *				
Supplemental Supplemental				GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UCI	P Field Study		38.2903	73 °	38.290373 °		
пеш			-121.62763	33 °	-121.627633 °			
DWR ID	21059							

## Inspector Comment

Comment Code

FS\_ID:32542 DS\_ID:21059 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Need to determine status of crossing. Horizontal and vertical cracks present on stand pipe located on landward side. Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) along the waterward slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances.

FIELD\_STRUCT\_DESC: 12-inch steel irrigation discharge pipe through the levee, 6 feet below the crown. 2-inch electrical conduit of an unknown material through the levee, at an unknown depth. Pump and gate valve on the waterside (WS) slope. Pipe exposed on the landside (LS). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959, (HLM 6.9)]. FS Date: 6/13/2013

Photo 3 of 3: UCIP\_SP\_2019\_32542\_59021.jpg



View of landward side. Pipe goes through levee and into concrete standpipe.

LM Start	6.40	Rating **	М	Issue No.		67	
LM End	6.40	Issue Type +	En	Location *			
Category	Supplemental			GPS Latitude/Longitu			
Calegory	Calegory					End	
Item	DWR UC	IP Field Study		38.2903	56°	38.290356°	
пеш				-121.6274	88 °	-121.627488 °	
DWR ID	24054						

### Inspector Comment

Comment Code

FS\_ID:42118 DS\_ID:24054 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: Need to determine encroachment number issued for pipe installation.

FIELD\_STRUCT\_DESC: Natural gas pipeline of an unknown size or material through the levee at an angle, at an unknown depth. Markers visible on each side. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959, (HLM 6.9)].

FS Date: 6/13/2013

## Photo 1 of 3: UCIP\_SP\_2019\_42118\_72902.jpg



Markers visible on waterward side.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Miner Slough	Left	7.71	03/12/2019 03/12/2019	David Julian

LM Start	6.40	Rating **	М	Issue No.		67 (cont)	
LM End	6.40	Issue Type +	En	Location *			
Category	Supplemental				GPS Latitude/Longitude		
Calegory				Start		End	
Item	DWR UC	IP Field Study		38.29035	6°	38.290356	٥
пеш				-121.62748	8°	-121.627488	٥
DWR ID	24054						

## Comment Code

## Inspector Comment

FS\_ID:42118 DS\_ID:24054 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: Need to determine encroachment number issued for

pipe installation.

FIELD\_STRUCT\_DESC: Natural gas pipeline of an unknown size or material through the levee at an angle, at an unknown depth. Markers visible on each side. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959, (HLM 6.9)].

FS Date: 6/13/2013



## Photo 2 of 3: UCIP\_SP\_2019\_42118\_72901.jpg



Marker visible on landward side.

## Photo 3 of 3: UCIP\_SP\_2019\_42118\_72900.jpg



Marker with contact information on landward side.

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Miner Slough	Left	7.71	03/12/2019 03/12/2019	David Julian

LM Start	6.40	Rating **	М	Issue No.		68
LM End	6.40	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS Lat	tud	e/Longitude
Calegory				Start		End
Item	DWR UC	IP Field Study		38.29035	1°	38.290351 °
пеш				-121.62745	2°	-121.627452 °
DWR ID	21057					

## Comment Code

## Inspector Comment

FS\_ID:19668 DS\_ID:21057 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Crossing was operating during inspection; Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) along the waterward slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances.

FİELD\_STRUCT\_DESC: 1 of 2: 30-inch coated steel irrigation siphon pipe through the levee, 9.5 feet below the crown. Cutoff wall around the pipe at the center of the levee. Siphon breaker on the landside (LS) slope. Primer tanks on the LS slope. Pipe exposed on both slopes. (Plans for the installation of a 30-inch siphon pipe through the levee authorized under Permit No. 611, 1934 - Reclamation District No. 501 [RD0501]. Plans to replace a 30-inch siphon pipe through the levee authorized under Permit No. 2497, 1957 - RD0501). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959, (HLM 6.9)].

FS Date: 6/13/2013

LM Start	6.40	Rating **	М	Issue No.	68 (cont)
LM End	6.40	Issue Type +	En	Location *	





Overview of levee crown--multiple crossings within a 50 foot stretch.

## Photo 2 of 3: UCIP\_SP\_2019\_19668\_33443.jpg



View of waterward side. Metal posts near the levee crown.

## **Levee Inspection Report By Mile - Spring 2019**

## Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Miner Slough	Left	7.71	03/12/2019 03/12/2019	David Julian

LM Start	6.40	Rating **	М	Issue No.		68 (cont)
LM End	6.40	Issue Type +	En	Location *		
Category	Supplemental					e/Longitude
Calegory				Start		End
Item	DWR UC	IP Field Study		38.29035	1°	38.290351 °
пеш				-121.627452	2°	-121.627452 °
DWR ID	21057					

## Comment Code

## Inspector Comment

FS\_ID:19668 DS\_ID:21057 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Crossing was operating during inspection; Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) along the waterward slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances.

FİELD\_STRUCT\_DESC: 1 of 2: 30-inch coated steel irrigation siphon pipe through the levee, 9.5 feet below the crown. Cutoff wall around the pipe at the center of the levee. Siphon breaker on the landside (LS) slope. Primer tanks on the LS slope. Pipe exposed on both slopes. (Plans for the installation of a 30-inch siphon pipe through the levee authorized under Permit No. 611, 1934 - Reclamation District No. 501 [RD0501]. Plans to replace a 30-inch siphon pipe through the levee authorized under Permit No. 2497, 1957 - RD0501). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959, (HLM 6.9)].

FS Date: 6/13/2013

## Photo 3 of 3: UCIP\_SP\_2019\_19668\_33442.jpg



Pipe visible through dense vegetation. Reminince of platform located on river.

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Miner Slough	Left	7.71	03/12/2019 03/12/2019	David Julian

LM Start	6.41	Rating **	М	Issue No.	69		
LM End	6.41	Issue Type +	En	Location *			
Category	Suppleme	GPS Latitude/Longitude					
Calegory				Start End			
Item	DWR UC	P Field Study		38.2903	45 °	38.290345°	
пеш				-121.6274	01 °	-121.627401 °	
DWR ID 21058							
Comment Code							

## Inspector Comment

FS\_ID:32543 DS\_ID:21058 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) along the waterward slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Need to find pipe owner. Unable to determine status of crossing.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 8-inch coated steel irrigation discharge pipe through the levee, 2.7 feet below the crown. Siphon breaker at the apex of the pipe on the landside (LS) shoulder. Surge chamber at the LS toe. Pump near the waterside (WS) toe. Pipe exposed on the LS. 4-foot by 3-foot concrete platform on the LS toe. 3-inch electrical conduit of an unknown material runs along the 8-inch coated steel pipe. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959, (HLM 6.9)]. FS Date: 6/13/2013



## Photo 1 of 3: UCIP\_SP\_2019\_32543\_59025.jpg

Overview of levee crown--multiple crossings within 50 foot stretch.

Photo 2 of 3: UCIP\_SP\_2019\_32543\_59027.jpg



View levee crown at crossing.

## **Levee Inspection Report By Mile - Spring 2019**

## Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Miner Slough	Left	7.71	03/12/2019 03/12/2019	David Julian

LM Start	6.41	Rating **	М	Issue No.		69 (cont)
LM End	6.41	Issue Type +	En	Location *		
Category	Supplemental GP				tud	e/Longitude
Calegory				Start		End
Item	DWR UC	IP Field Study		38.29034	5°	38.290345°
пеш				-121.62740 <sup>-</sup>	ı °	-121.627401 °
DWR ID	21058					

### Comment Code

## Inspector Comment

FS\_ID:32543 DS\_ID:21058 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) along the waterward slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Need to find pipe owner. Unable to determine status of crossing.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 8-inch coated steel irrigation discharge pipe through the levee, 2.7 feet below the crown. Siphon breaker at the apex of the pipe on the landside (LS) shoulder. Surge chamber at the LS toe. Pump near the waterside (WS) toe. Pipe exposed on the LS. 4-foot by 3-foot concrete platform on the LS toe. 3-inch electrical conduit of an unknown material runs along the 8-inch coated steel pipe. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959, (HLM 6.9)]. FS Date: 6/13/2013

## Photo 3 of 3: UCIP\_SP\_2019\_32543\_59026.jpg



View of waterward side. Dense vegetation along levee slope.

## **Levee Inspection Report By Mile - Spring 2019**

## Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Miner Slough	Left	7.71	03/12/2019 03/12/2019	David Julian

LM Start	6.41	Rating **	М	Issue No.		70
LM End	6.41	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS Lat	itud	e/Longitude
Calegory				Start		End
Item	DWR UC	IP Field Study		38.29035	6°	38.290356 °
пеш				-121.62734	9°	-121.627349°
DWR ID	21027					

### Comment Code

## Inspector Comment

FS\_ID:44748 DS\_ID:21027 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pipe appears abandoned and if so should be done so

properly.

FIELD\_STRUCT\_DESC: 2 of 2: 4-inch coated steel irrigation siphon pipe through the levee, 7.3 feet below the crown. Pipe visible on the upstream side of the wooden platform on the waterside (WS) slope. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento

O&M Manual 105, April 1959, (HLM 6.9)].

FS Date: 4/23/2015

LM Start	6.41	Rating **	М	Issue No.	70 (cont)
LM End	6.41	Issue Type +	En	Location *	

## Photo 1 of 2: UCIP\_SP\_2019\_44748\_73948.jpg



4-inch pipe connected to smaller galvalized iron pipe on WS slope.

## Photo 2 of 2: UCIP\_SP\_2019\_44748\_73947.jpg



Pipe visible on upstream side of wooden platform on the WS slope.

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Miner Slough	Left	7.71	03/12/2019 03/12/2019	David Julian

LM Start	6.61	Rating **	М	Issue No.		39
LM End	6.61	Issue Type +	Ма	Location *		LS
Category	evee	GPS Latitude/Longitude				
Calegory				Start		End
Item	Animal Co	ontrol		38.29031	3°	38.290313 °
пеш				-121.62378	85 °	-121.623785 °
DWR ID DWR_RD0501_03_f _ 2016_39						

## Comment Code

A1: Exterminate rodents and backfill and compact or grout burrows.

## Inspector Comment

There is evidence of significant rodent activity at this location. Exterminate the rodents and backfill the holes.

## Photo 1 of 1 : SP\_2019\_RD0501\_171\_39\_20190311\_00007.jpg



Phot of evidence of significant rodent activity at this location

LM Start	6.81	Rating **	М	Issue No.		71	
LM End	6.81	Issue Type +	En	Location *			
Category	Catagoni Supplemental				GPS Latitude/Longitude		
Calegory	egory					End	
Item	DWR UCI	P Field Study	38.2901	30°	38.290130°		
item				-121.6201	68°	-121.620168 °	
DWR ID	21060						

## Comment Code

## Inspector Comment

FS\_ID:32544 DS\_ID:21060 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) along the slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Walkway missing but platform remain on the waterward side.

FIELD\_STRUCT\_DESC: 12-inch irrigation discharge pipe of an unknown material through the levee, 6.5 feet below the crown. Switch panel on the waterside (WS) slope. Pump on a pile structure in the stream. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959, (HLM 7.3)].

FS Date: 6/13/2013

## Photo 1 of 3: UCIP\_SP\_2019\_32544\_59034.jpg



View of waterward side. Support piles, conduit line, and pump visible on waterward side. Dense vegetation covers waterward slope.

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Miner Slough	Left	7.71	03/12/2019 03/12/2019	David Julian

LM Start	6.81	Rating **	М	Issue No.		71 (cont)
LM End	6.81	Issue Type +	En	Location *		
Category	ental	GPS Latitude/Longitude				
Calegory	egory					End
Item	DWR UC	IP Field Study		38.29013	30°	38.290130°
пеш				-121.62016	88°	-121.620168 °
DWR ID	21060					

## Comment Code

## Inspector Comment

FS\_ID:32544 DS\_ID:21060 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) along the slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Walkway missing but platform remain on the waterward side.

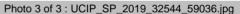
FIELD\_STRUCT\_DESC: 12-inch irrigation discharge pipe of an unknown material through the levee, 6.5 feet below the crown. Switch panel on the waterside (WS) slope. Pump on a pile structure in the stream. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959, (HLM 7.3)].

FS Date: 6/13/2013

LM Start	6.81	Rating **	М	Issue No.	71 (cont)
LM End	6.81	Issue Type +	En	Location *	



View of standpipes located on landward side.





Dry vegetation throughout the landward slope.

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Miner Slough	Left	7.71	03/12/2019 03/12/2019	David Julian

LM Start	7.22	Rating **	М	Issue No.		72	
LM End	7.22	Issue Type +	En	Location *			
Category				GPS Latitude/Longitude			
Calegory	gory					End	
Item	DWR UCIP Field Study				37°	38.287837	
пеш				-121.6134	53 °	-121.613453 °	
DWR ID	DWR ID 21061						

### Comment Code

## Inspector Comment

FS\_ID:46834 DS\_ID:21061 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 11/19/2015 DWR Inspector (H. Phillips) coordinated with LMA superintendent and the owner for this crossing is Walter Koeing, APN No. 042220040. According to LMA superintendent owner installed filter system with fence on landward side and fence around pump in 2012. Pipe not replaced in 2012, this pipe would be a good candinate for internal inspection since the installation date for this crossing was recorded as 1946.06/13/2013 Conduit visible on landward side; new gate on WS toe; filtration system with security fence; Pipe has been upgraded--need permit authorizing work and owner. Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) along the waterward slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances.

FIELD\_STRUCT\_DESC: 8-inch steel irrigation discharge pipe through the levee, 3.7 feet below the crown. Siphon breaker and service pole on the landside (LS) slope. 2-inch electrical conduit of an unknown material runs parallel to the 8-inch steel pipe. Pump in a pump house on the waterside (WS) slope. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959, (HLM 8.0)]. FS Date: 6/13/2013

 LM Start
 7.22
 Rating \*\*
 M
 Issue No.
 72 (cont)

 LM End
 7.22
 Issue Type +
 En
 Location \*

Photo 1 of 3: UCIP\_SP\_2019\_46834\_33471.jpg

Overview of levee crown.

## Photo 2 of 3: UCIP\_SP\_2019\_46834\_33468.jpg



Pipe connection after pump station.

\*\* Rating

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiency

Ob: Design & System Obsolescence

En: Enforcement

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiency
Ob: Design & System Obsolescence
En: Enforcement

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Miner Slough	Left	7.71	03/12/2019 03/12/2019	David Julian

LM Start	7.22	Rating **	М	Issue No.		72 (cont)
LM End	7.22	Issue Type +	En	Location *		
Category	Suppleme	GPS Latitude/Longitude				
Calegory				Start		End
Item	DWR UC	IP Field Study		38.28783	7 °	38.287837°
пеш				-121.61345	3°	-121.613453°
DWR ID	21061					

## Comment Code

## Inspector Comment

FS\_ID:46834 DS\_ID:21061 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 11/19/2015 DWR Inspector (H. Phillips) coordinated with LMA superintendent and the owner for this crossing is Walter Koeing, APN No. 042220040. According to LMA superintendent owner installed filter system with fence on landward side and fence around pump in 2012. Pipe not replaced in 2012, this pipe would be a good candinate for internal inspection since the installation date for this crossing was recorded as 1946.06/13/2013 Conduit visible on landward side; new gate on WS toe; filtration system with security fence; Pipe has been upgraded--need permit authorizing work and owner. Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) along the waterward slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances.

FIELD\_STRUCT\_DESC: 8-inch steel irrigation discharge pipe through the levee, 3.7 feet below the crown. Siphon breaker and service pole on the landside (LS) slope. 2-inch electrical conduit of an unknown material runs parallel to the 8-inch steel pipe. Pump in a pump house on the waterside (WS) slope. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959, (HLM 8.0)].

FS Date: 6/13/2013

## Photo 3 of 3: UCIP\_SP\_2019\_46834\_33467.jpg



Pipe section near toe is protected by security fence.

LM Start	7.55	Rating **	U	Issue No.		42	
LM End	7.55	Issue Type +	En	Location *		LS	
Category	Earthen Levee				GPS Latitude/Longitude		
Category				Start		End	
Item	Vegetatio	n		38.28665	3°	38.286653 °	
пеш				-121.60841	7°	-121.608417 °	
DWR ID	DWR_RD0	501_03_f _ 201	7_42				

## Comment Code

V6: Landscaping

## Inspector Comment

Remove/thin landscaping to allow inspection and access to landside slope and toe.

## Photo 1 of 1: SP\_2019\_RD0501\_171\_42\_20190311\_00010.jpg



Photo of landscaping on landside slope and toe

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

## **Levee Inspection Report By Mile - Spring 2019**

## Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Miner Slough	Left	7.71	03/12/2019 03/12/2019	David Julian

LM Start	7.58	Rating **	M	Issue No.		43
LM End	7.58	Issue Type +	Ma	Location *		LS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory				Start		End
Item	Trim / Thi	n Trees		38.2862	22°	38.286222°
пеш					27 °	-121.608127°
DWR ID	DWR_RD0	501_03_f _ 201	7_43			
		Comn	nent Cod	le		
T1 : Trim t	rees to at	least five feet	above g	round level		
		Inspecto	or Comm	nent		

No Photos

LM Start	7.59	Rating **	М	Issue No.		73	
LM End	7.59	Issue Type +	En	Location *			
Category				GPS Latitude/Longitude			
Calegory	Calegory			Start	End		
Item	DWR UC	IP Field Study	,	38.28615	3°	38.286153	0
пеш				-121.60795	9°	-121.607959	0
DWR ID	21063						

## Comment Code

## Inspector Comment

FS\_ID:50025 DS\_ID:21063 EP\_NO: 11812

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 8/22/2016 Crossing has been downgraded from Urgent to Non-Urgent no levee damage appears to be present along pipe alignment. There appears to be an erosion site adjacent to this crossing. Need to coordinate with DWR Inspectors. (DWR UCIP - omagana)6/07/2013 Open cut section of levee on LS slope 8 foot wide--repair work needed. Abandoned pump on waterward berm. Dense vegetation--Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances on waterward side. (DWR UCIP - omagana)

FIELD\_STRUCT\_DESC: 14-inch coated steel irrigation discharge pipe and a 1.25-inch electrical conduit of an unknown material through the levee, both 3 feet below the crown. Cutoff wall around the pipe and conduit at the center of the levee. Siphon breaker at the apex of the pipe on the landside (LS) shoulder. Slant pump on the waterside (WS) slope. Discharge structure at the LS toe. Rock revetment on the WS slope. (Plans to replace a 14-inch irrigation pipe through the levee crown and a slant pump on the riverbank authorized under Permit No. 11812, 1976 - Harry H. Rasmussen). [Additional Reference(s): DWR Levee Log, 2005].

FS Date: 8/22/2016

Photo 1 of 3: UCIP\_SP\_2019\_50025\_59039.jpg



View of levee crown at crossing.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Miner Slough	Left	7.71	03/12/2019 03/12/2019	David Julian

LM Start	7.59	Rating **	М	Issue No.		73 (cont)		
LM End	7.59	Issue Type +	En	Location *				
Category	Supplemental				GPS Latitude/Longitude			
Calegory				Start		End		
Item	DWR UC	IP Field Study		38.28615	3°	38.286153	0	
пеш				-121.60795	9°	-121.607959	0	
DWR ID	21063							

## Comment Code

## Inspector Comment

FS\_ID:50025 DS\_ID:21063 EP\_NO: 11812

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 8/22/2016 Crossing has been downgraded from Urgent to Non-Urgent no levee damage appears to be present along pipe alignment. There appears to be an erosion site adjacent to this crossing. Need to coordinate with DWR Inspectors. (DWR UCIP - omagana)6/07/2013 Open cut section of levee on LS slope 8 foot wide--repair work needed. Abandoned pump on waterward berm. Dense vegetation--Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances on waterward side. (DWR UCIP - omagana)

FIELD\_STRUCT\_DESC: 14-inch coated steel irrigation discharge pipe and a 1.25-inch electrical conduit of an unknown material through the levee, both 3 feet below the crown. Cutoff wall around the pipe and conduit at the center of the levee. Siphon breaker at the apex of the pipe on the landside (LS) shoulder. Slant pump on the waterside (WS) slope. Discharge structure at the LS toe. Rock revetment on the WS slope. (Plans to replace a 14-inch irrigation pipe through the levee crown and a slant pump on the riverbank authorized under Permit No. 11812, 1976 - Harry H. Rasmussen). [Additional Reference(s): DWR Levee Log, 2005].

FS Date: 8/22/2016

LM Start	7.59	Rating **	M	Issue No.	73 (cont)
LM End	7.59	Issue Type +	Fn	Location *	

## Photo 2 of 3: UCIP\_SP\_2019\_50025\_59042.jpg



View of WS--pump located at the berm edge.

## Photo 3 of 3: UCIP\_SP\_2019\_50025\_75668.jpg



View of WS.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Miner Slough	Left	7.71	03/12/2019 03/12/2019	David Julian

LM Start	7.60	Rating **	М	Issue No.		74		
LM End	7.60	Issue Type +	En	Location *				
Category	Supplemental				GPS Latitude/Longitude			
Calegory	Calegory					End		
Item	DWR UC	DWR UCIP Field Study			1°	38.286134 °		
пеш				-121.607920	°	-121.607920 °		
DWR ID	21064							

## Inspector Comment

Comment Code

FS\_ID:32546 DS\_ID:21064 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Debris (pipe section) located on waterward berm. Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) along the waterward slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances.

FIELD\_STRUCT\_DESC: 8-inch steel irrigation discharge pipe through the levee, 2.7 feet below the crown. Pump in a pump house at the landside (LS) toe. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959, (HLM 8.2)].

FS Date: 6/13/2013

LM Start	7.60	Rating **	M Issue No.		74 (cont)
LM End	7.60	Issue Type +	En	Location *	

## Photo 1 of 3: UCIP\_SP\_2019\_32546\_59047.jpg



View of levee crown at crossing.

## Photo 2 of 3: UCIP\_SP\_2019\_32546\_59048.jpg



View of wateward side--dense vegetation limits visibility of 8-inch steel pipe. Pump belongs to another crossing.

## **Levee Inspection Report By Mile - Spring 2019**

## Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Miner Slough	Left	7.71	03/12/2019 03/12/2019	David Julian

LM Start	7.60	Rating **	М	Issue No.		74 (cont)
LM End	7.60	Issue Type +	En	Location *		
Supplemental				GPS Latitude/Longitude		
Calegory	Category			Start		End
Item	DWR UC	IP Field Study		38.28613	4 °	38.286134°
пеш	item			-121.60792	o°	-121.607920 °
DWR ID	21064					

## Inspector Comment

Comment Code

FS\_ID:32546 DS\_ID:21064 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Debris (pipe section) located on waterward berm. Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) along the waterward slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances.

FIELD\_STRUCT\_DESC: 8-inch steel irrigation discharge pipe through the levee, 2.7 feet below the crown. Pump in a pump house at the landside (LS) toe. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959, (HLM 8.2)].

FS Date: 6/13/2013

## Photo 3 of 3: UCIP\_SP\_2019\_32546\_59049.jpg



View of waterward side looking up at levee shoulder.

## **Unit Cover Sheet**

**Spring 2019 Levee Inspection Results** 

## Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles
Unit No. 04 Sutter Slough	Right	2.28

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)				
Date of Inspection	3/12/2019 - 3/12/2019			
DWR Inspector	David Julian			
Accompanied By	Nick Zepeda Reclamation District 501			

### Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

## http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 04 Sutter Slough	Right	2.28	03/12/2019 03/12/2019	David Julian

LM Start	0.11	Rating **	М	Issue No.		15			
LM End	0.11	Issue Type +	En	Location *		LS			
Earthen Levee			GPS La	atitud	e/Longitude				
Category				Start		End			
Item	Encroach	ments		38.2841	77 °	38.284177°			
пеш				-121.6047	60°	-121.604760 °			
DWR ID	DWR ID DWR_RD0501_04_f _ 2018_15								
		Comn	nent Cod	le					
PR : Pruni	ngs								
	Inspector Comment								
Pruning pile at landside toe needs removal.									



View of pruning pile on the landside toe (November 2018)

LM Start	0.11	Rating **	М	Issue No.		16			
LM End	0.11	Issue Type +	En	Location *		LS			
Category Earthen Levee			GPS La	atitud	e/Longitude				
Category				Start		End			
Item	Vegetatio	n		38.2841	77 °	38.284177°			
пеш				-121.6047	60°	-121.604760 °			
DWR ID DWR_RD0501_04_f _ 2018_16									
		Comn	nent Cod	le					
V6 : Lands	caping								
		Inspecto	or Comm	nent					
Patch of ca	Patch of cactus is being dealt with by LMA								



View of cactus on the land side slope. LMA has chopped and sprayed cactus at the top of the slope and is in process of dealing with cactus along the entire slope (November 2018).

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 04 Sutter Slough	Right	2.28	03/12/2019 03/12/2019	David Julian

LM Start	0.43	Rating **	М	Issue No.		22
LM End	0.43	Issue Type +	Ma	Location *		LS
Category Earthen Levee				GPS Latitude/Longitude		
				Start		End
Item	Vegetatio	n		38.2803	60 °	38.280360 °
пеш			-121.6015	30°	-121.601530°	
DWR ID DWR_RD0501_04_s _ 2019_22						
Comment Code						

V1 : Control annual grass and weeds on the levee slopes and easements.

## Inspector Comment

Remove vegetation from landside slope.



View looking downstream at vegetation on the land side slope (Spring 2019).

LM Start	0.54	Rating **	M	Issue No.		23		
LM End	0.54	Issue Type +	En	Location *				
Category	ental	GPS La	atitud	le/Longitude				
Calegory				Start		End		
Item	DWR UC	P Field Study		38.2788	48°	38.278848 °		
item				-121.6012	16°	-121.601216 °		
DWR ID	DWR ID 21080							
Comment Code								

## Inspector Comment

FS\_ID:32547 DS\_ID:21080 EP\_NO: 18135

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Cracks visible on levee crown could be associated with pipe vibration or settlement. Burrow activity on landward side. Recommend removing vegetation along pipe alignment on landward side to conduct proper inspection of structure and appurtenances. FIELD\_STRUCT\_DESC: 10-inch galvanized iron irrigation discharge pipe through the levee, 3.5 feet below the crown. Cutoff wall around the pipe on the landside (LS) shoulder. Slant pump and pump house on the waterside (WS) slope. Concrete standpipe and power pole at the LS toe. Service pole on the LS slope. Pipe exposed on both slopes. Two crossings are nearby: A 10-inch pipe and an 8-inch pipe crossings are approximately 5 feet apart. (Plans to replace an existing pump and pipeline with a new pump and pipeline authorized under Permit No. 2446, 1957 - Doris R. Geary. Plans to replace an existing water pipe with a 10-inch steel pipe through the levee authorized under Permit No. 18135, 2006 - Charlotte Gilmore). [Additional Reference(s): DWR Levee Log, 2005]. FS Date: 6/7/2013



View of levee crown

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 04 Sutter Slough	Right	2.28	03/12/2019 03/12/2019	David Julian

LM Start	0.54	Rating **	М	Issue No.		23 (cont)
LM End	0.54	Issue Type +	En	Location *		
Category	ental	GPS Latitude/Longitude				
Calegory	Category					End
Item	DWR UC	IP Field Study		38.2788	48 °	38.278848 °
пеш				-121.6012	16 °	-121.601216 °
DWR ID	21080					

### Comment Code

## Inspector Comment

FS\_ID:32547 DS\_ID:21080 EP\_NO: 18135

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Cracks visible on levee crown could be associated with pipe vibration or settlement. Burrow activity on landward side. Recommend removing vegetation along pipe alignment on landward side to conduct proper inspection of structure and appurtenances. FIELD\_STRUCT\_DESC: 10-inch galvanized iron irrigation discharge pipe through the levee, 3.5 feet below the crown. Cutoff wall around the pipe on the landside (LS) shoulder. Slant pump and pump house on the waterside (WS) slope. Concrete standpipe and power pole at the LS toe. Service pole on the LS slope. Pipe exposed on both slopes. Two crossings are nearby: A 10-inch pipe and an 8-inch pipe crossings are approximately 5 feet apart. (Plans to replace an existing pump and pipeline with a new pump and pipeline authorized under Permit No. 2446, 1957 - Doris R. Geary. Plans to replace an existing water pipe with a 10-inch steel pipe through the levee authorized under Permit No. 18135, 2006 - Charlotte Gilmore). [Additional Reference(s): DWR Levee Log, 2005]. FS Date: 6/7/2013

LM Start	0.54	Rating **	М	Issue No.	23 (cont)
LM End	0.54	Issue Type +	Fn	Location *	



Overview of waterward side--2 crossings located within 5 feet.

## Photo 3 of 3: UCIP\_SP\_2019\_32547\_59053.jpg



Slant pump located on waterward side. 10 inch pipe connects at an angle to tar coated pipe.

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 04 Sutter Slough	Right	2.28	03/12/2019 03/12/2019	David Julian

LM Start	0.54	Rating **	М	Issue No.		24	
LM End	0.54	Issue Type +	En	Location *			
Category	ental	GPS Latitude/Longitude					
Calegory	Category					End	
Item	DWR UC	P Field Study		38.27883	81 °	38.278831 °	
пеш				-121.60121	3°	-121.601213 °	
DWR ID 21079							
	Comment Code						

## Inspector Comment

FS\_ID:32548 DS\_ID:21079 EP\_NO: 2446

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Permit documents indicate that pipe does not appear to be properly grouted. Crossing needs to be properly abandoned per CVFPB Title 23--need to find owner. Also recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 8-inch steel irrigation discharge pipe through the levee, 6 feet below the crown. Pump on the waterside (WS). Steel plate welded on the WS end. 10-inch steel pipe approximately 5 feet downstream. (Plans to replace an existing pump and pipeline with a new pump and pipeline authorized under Permit No. 2446, 1957 - Doris R. Geary). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959, (HLM 0.6)].

FS Date: 6/13/2013

LM Start	0.54	Rating **	М	Issue No.	24 (cont)
LM End	0.54	Issue Type +	En	Location *	



View of levee crown at crossing.





Overview of waterward side. Two crossings, 10 inch and 8 inch pipelines, less than 5 feet apart.

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency

Ob : Design & System Obsolescence
En : Enforcement

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 04 Sutter Slough	Right	2.28	03/12/2019 03/12/2019	David Julian

LM Start	0.54	Rating **	М	Issue No.		24 (cont)	
LM End	0.54	Issue Type +	En	Location *			
Category	Supplemental				GPS Latitude/Longitude		
Calegory				Start		End	
Item	DWR UC	IP Field Study		38.27883	1 °	38.278831 °	
пеш				-121.60121	3°	-121.601213 °	
DWR ID	21079						

## Comment Code

## Inspector Comment

FS\_ID:32548 DS\_ID:21079 EP\_NO: 2446

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Permit documents indicate that pipe does not appear to be properly grouted. Crossing needs to be properly abandoned per CVFPB Title 23--need to find owner. Also recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 8-inch steel irrigation discharge pipe through the levee, 6 feet below the crown. Pump on the waterside (WS). Steel plate welded on the WS end. 10-inch steel pipe approximately 5 feet downstream. (Plans to replace an existing pump and pipeline with a new pump and pipeline authorized under Permit No. 2446, 1957 - Doris R. Geary). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959, (HLM 0.6)].

FS Date: 6/13/2013

## Photo 3 of 3: UCIP\_SP\_2019\_32548\_59056.jpg



Pump house is associated with abandoned 8 inch pipe.

LM Start	0.84	Rating **	М	Issue No.	No. 11		
LM End	0.84	Issue Type +	Ma	Location *	LS		
Category	Earthen L	evee	GPS Latitude/Longitude				
Calegory				Start		End	
Item	Vegetatio	n		38.2746	15°	38.274615	٥
item				-121.6027	18°	-121.602718	0
DWR ID	DWR ID DWR_RD0501_04_f _ 2017_11						
Commant Code							

V2 : Remove the wild growth other than native grasses from the levee slopes.

## Inspector Comment

Remove thick blackberries at landside toe to allow inspection and access.

## Photo 1 of 1 : SP\_2019\_RD0501\_172\_11\_20190311\_00001.jpg



Thick blackberries should be removed.

## **Levee Inspection Report By Mile - Spring 2019**

## Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 04 Sutter Slough	Right	2.28	03/12/2019 03/12/2019	David Julian

LM Start	0.99	Rating **	М	Issue No.		12			
LM End	0.99	Issue Type +	En	Location *		LS			
Category	Earthen L	evee		GPS Lat	itud	e/Longitude			
Calegory				Start		End			
Item	Vegetatio	n		38.27265	o°	38.272650 °			
пеш				-121.60396	o°	-121.603960 °			
DWR ID	DWR_RD0	501_04_f _ 201	7_12						
		Comn	nent Cod	le					
V6 : Lands	caping								
	Inspector Comment								
Trim fig and other trees to allow inspection and access to landside slope and toe.									



View of fig and other trees on landside slope and toe

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 04 Sutter Slough	Right	2.28	03/12/2019 03/12/2019	David Julian

LM Start	1.04	Rating **	U	Issue No.		25		
LM End	1.04	Issue Type +	En	Location *				
Category	Supplemental					GPS Latitude/Longitude		
Calegory				Start		End		
Item	DWR UC	IP Field Study		38.27205	3°	38.272053 °		
пеш				-121.60417	6°	-121.604176 °		
DWR ID	21072							

## Comment Code

## Inspector Comment

FS\_ID:53356 DS\_ID:21072 EP\_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 07/24/2018 Same as last inspection. LS pipe appears to be rusted through and has too many holes for it to be in operation; therefore keeping Urgent until internal pipe inspection can be performed to determine internal levee intergrity is good (D. Sanoski - DWR UCIP).8/22/2016 Assume conditions at this crossing have remained the same--pipe wall is still deteriorating. Unable to locate crossing due to dense vegetation along both WS and LS slopes. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. (DWR UCIP - omagana)6/13/2013 Pipe has deteriorated-holes present on landward side. Need to contact owner. Unable to determine if crossing is still being used. Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) along the waterward slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. (DWR UCIP - omagana)

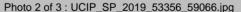
FIELD\_STRUCT\_DESC: \*ABANDONED\* 8-inch steel irrigation discharge pipe through the levee, 2.7 feet below the crown. Pump on the waterside (WS). Steel plate welded on the WS end. Unable to confirm if plate is still present in 2016. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959, (HLM 1.1)].

FS Date: 7/24/2018 11:37:00 AM

LM Start	1.04	Rating **	U	Issue No.	25 (cont)
LMEnd	1 04	Issue Type +	Fn	Location *	



View of levee crown at crossing.





View of levee crown at crossing.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

## **Levee Inspection Report By Mile - Spring 2019**

## Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 04 Sutter Slough	Right	2.28	03/12/2019 03/12/2019	David Julian

LM Start	1.04	Rating **	U	Issue No.		25 (cont)				
LM End	1.04	Issue Type +	En	Location *						
Category	Supplemental					GPS Latitude/Longitude				
Calegory				Start		End				
Item	DWR UC	P Field Study		38.2720	53°	38.272053	0			
item			-121.6041	76°	-121.604176	0				
DWR ID	21072									

## Comment Code

## Inspector Comment

FS ID:53356 DS\_ID:21072 EP NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 07/24/2018 Same as last inspection. LS pipe appears to be rusted through and has too many holes for it to be in operation: therefore keeping Urgent until internal pipe inspection can be performed to determine internal levee intergrity is good (D. Sanoski - DWR UCIP).8/22/2016 Assume conditions at this crossing have remained the same--pipe wall is still deteriorating. Unable to locate crossing due to dense vegetation along both WS and LS slopes. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. (DWR UCIP - omagana)6/13/2013 Pipe has deteriorated-holes present on landward side. Need to contact owner. Unable to determine if crossing is still being used. Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) along the waterward slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. (DWR UCIP - omagana)

FIELD\_STRUCT\_DESC: \*ABANDONED\* 8-inch steel irrigation discharge pipe through the levee, 2.7 feet below the crown. Pump on the waterside (WS). Steel plate welded on the WS end. Unable to confirm if plate is still present in 2016. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959, (HLM 1.1)].

FS Date: 7/24/2018 11:37:00 AM





High vegetation along waterward side.

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 04 Sutter Slough	Right	2.28	03/12/2019 03/12/2019	David Julian

LM Start	1.08	Rating **	М	Issue No.		26
LM End	1.08	Issue Type +	En	Location *		
Category	ental	GPS Latitude/Longitude				
Calegory				Start		End
Item	DWR UC	IP Field Study		38.27140	0 °	38.271400°
item			-121.60436	8°	-121.604368 °	
DWR ID	21073					

## Comment Code

## Inspector Comment

FS\_ID:32550 DS\_ID:21073 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: Unable to determine if the pipe goes through the

levee. need As-Built drawings; Need owner information.

FIELD\_STRUCT\_DESC: 1.5-inch communications conduit of an unknown material through the levee, 2 feet below the crown. Pole and anchor on the landside (LS) slope. [Additional Reference(s): DWR Levee Log, 2005].

FS Date: 6/13/2013

LM Start	1.08	Rating **	М	Issue No.	26 (cont)
LM End	1.08	Issue Type +	En	Location *	

## Photo 1 of 3: UCIP\_SP\_2019\_32550\_59068.jpg



Levee crown at crossing.

## Photo 2 of 3: UCIP\_SP\_2019\_32550\_59067.jpg



View of waterward side.

## **Levee Inspection Report By Mile - Spring 2019**

## Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 04 Sutter Slough	Right	2.28	03/12/2019 03/12/2019	David Julian

LM Start	1.08	Rating **	М	Issue No.		26 (cont)
LM End	1.08	Issue Type +	En	Location *		
Supplemental				GPS Latitude/Longitude		
Calegory	Category					End
Item	DWR UC	IP Field Study		38.27140	°	38.271400 °
пеш				-121.604368	3°	-121.604368 °
DWR ID	21073					

## Comment Code

## Inspector Comment

FS\_ID:32550 DS\_ID:21073 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: Unable to determine if the pipe goes through the

levee. need As-Built drawings; Need owner information.

FIELD\_STRUCT\_DESC: 1.5-inch communications conduit of an unknown material through the levee, 2 feet below the crown. Pole and anchor on the landside (LS) slope. [Additional Reference(s): DWR Levee Log, 2005].

FS Date: 6/13/2013

## Photo 3 of 3: UCIP\_SP\_2019\_32550\_59069.jpg



View of landward side--power pole and guy wire under trees.

LM Start	1.17	Rating **	М	Issue No.	27		
LM End	1.17	Issue Type +	En	Location *			
Category	GPS Latitude/Longitude						
Calegory	Category					End	
Item	DWR UC	P Field Study		38.27017	°	38.270171	0
пеш		-121.60440	°	-121.604403	0		
DWR ID	21074						

## Inspector Comment

Comment Code

FS\_ID:32551 DS\_ID:21074 EP NO: N/A

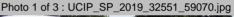
Repair Type: Non-Urgent

Crossing Status: Found

UCIP Comments: Unable to determine status of crossing. Pipe visible on waterward side--could be the pipe that was supposed to be removed under permit number 13983 (1985). Also present is a 1.5 inch conduit along the 8 inch pipe. Need to coordinate with owner.

FIELD\_STRUCT\_DESC: 8-inch steel irrigation discharge pipe through the levee, 6.4 feet below the crown. Pump on a pile structure in the stream. Service pole on the landside (LS) slope. (8-inch pipe should have been removed and replaced with a 12-inch pipe authorized under Permit No. 13983, 1984 - Mrs. John Thomas). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959, (HLM 1.3)].

FS Date: 6/13/2013





View of levee crown at crossing.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 04 Sutter Slough	Right	2.28	03/12/2019 03/12/2019	David Julian

LM Start	1.17	Rating **	М	Issue No.		27 (cont)
LM End	1.17	Issue Type +	En	Location *		
Category	ental	GPS Latitude/Longitude				
Calegory	Category					End
Item	DWR UC	IP Field Study		38.27017	'1 °	38.270171 °
пеш			-121.60440	3 °	-121.604403 °	
DWR ID	21074					

## Comment Code

## Inspector Comment

FS\_ID:32551 DS\_ID:21074 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Unable to determine status of crossing. Pipe visible on waterward side--could be the pipe that was supposed to be removed under permit number 13983 (1985). Also present is a 1.5 inch conduit

along the 8 inch pipe. Need to coordinate with owner. FIELD\_STRUCT\_DESC: 8-inch steel irrigation discharge pipe through the levee, 6.4 feet below the crown. Pump on a pile structure in the stream. Service pole on the landside (LS) slope. (8-inch pipe should have been removed and replaced with a 12-inch pipe authorized under Permit No. 13983, 1984 - Mrs. John Thomas). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959, (HLM 1.3)].

FS Date: 6/13/2013

LM Start	1.17	Rating **	М	Issue No.	27 (cont)
LM End	1.17	Issue Type +	En	Location *	



Abandoned pipe to the right of walkway.

Photo 3 of 3: UCIP SP 2019 32551 59071.jpg



View of landward side--power pole on slope.

## **Levee Inspection Report By Mile - Spring 2019**

## Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 04 Sutter Slough	Right	2.28	03/12/2019 03/12/2019	David Julian

LM Start	1.17 Rating ** M			Issue No.		28
LM End	1.17	Issue Type +	En	Location *		
Category Supplemental			GPS La	titud	le/Longitude	
Calegory				Start		End
Item	DWR UCIP Field Study			38.2701	56°	38.270156 °
пеш				-121.6044	03 °	-121.604403 °
DWR ID	21095					

Comment Code

Inspector Comment FS\_ID:32552 DS\_ID:21095

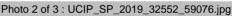
EP\_NO: 13983 Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Abandoned pipe was to be removed during the installation of new 12-inch pipe crossing. Need to contact pipe owner. Unable to confirm crossing-need additional records for crossing. FIELD\_STRUCT\_DESC: 12-inch coated steel irrigation discharge pipe through the levee, 5 feet below the crown. Cutoff wall around the pipe at the center of the levee. Siphon breaker at the apex of the pipe on the landside (LS) shoulder. Pump on a pile structure in the stream. Service pole on the LS slope. Pipe connects to a 10-inch steel pipe along the LS slope at the shoulder and similarly to a preexisting 8-inch pipe on the waterside (WS). (8-inch pipe should have been removed and replaced with a 12-inch pipe authorized under Permit No. 13983, 1984 - Mrs. John Thomas).

LM Start	1.17	Rating **	М	Issue No.	28 (cont)
LM End	1.17	Issue Type +	En	Location *	



View of levee crown at crossing.





View of waterward side--walkway, pump, conduit, and pipe.

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 04 Sutter Slough	Right	2.28	03/12/2019 03/12/2019	David Julian

LM Start	1.17	Rating **	М	Issue No.		28 (cont)
LM End	1.17	Issue Type +	En	Location *		
Category Supplemental			GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR UCIP Field Study			38.27015	6°	38.270156 °
пеш				-121.60440	3°	-121.604403 °
DWR ID	21095					

## Comment Code

## Inspector Comment

FS\_ID:32552 DS\_ID:21095 EP\_NO: 13983

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Abandoned pipe was to be removed during the installation of new 12-inch pipe crossing. Need to contact pipe owner. Unable to confirm crossing--need additional records for crossing. FIELD\_STRUCT\_DESC: 12-inch coated steel irrigation discharge pipe through the levee, 5 feet below the crown. Cutoff wall around the pipe at the center of the levee. Siphon breaker at the apex of the pipe on the landside (LS) shoulder. Pump on a pile structure in the stream. Service pole on the LS slope. Pipe connects to a 10-inch steel pipe along the LS slope at the shoulder and similarly to a preexisting 8-inch pipe on the waterside (WS). (8-inch pipe should have been removed and replaced with a 12-inch pipe authorized under Permit No. 13983, 1984 - Mrs. John Thomas).

Photo 3 of 3: UCIP\_SP\_2019\_32552\_59075.jpg



Pipe suspended on waterward side along walkway.

LM Start	1.24	Rating **	С	Issue No.	18			
LM End	1.24	Issue Type +	Ма	Location *		LS		
Category Earthen Levee				GPS Latitude/Longitude				
Calegory				Start		End		
Item	Trim / Thin Trees			38.2691	73 °	38.269173 °		
пеш				-121.6042	15 °	-121.604215 °		
DWR ID	DWR_RD0501_04_f _ 2018_18							
Comment Code								

T2: Thin trees to allow visibility of the ground and room to flood fight.

Inspector Comment

No Photos

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS : Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR · Crown	U · Unaccentable	A/W · Acceptable but Monitor & Maintain	En : Enforcement

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 04 Sutter Slough	Right	2.28	03/12/2019 03/12/2019	David Julian

LM Start	1.48	Rating **	С	Issue No.	19		
LM End	1.48	Issue Type +	Ма	Location *	LS		
Category Earthen Levee			GPS La	titud	le/Longitude		
Category				Start		End	
Item	Trim / Thin Trees			38.26586	62°	38.265862 °	
пеш				-121.60269	98°	-121.602698 °	
DWR ID	DWR_RD0501_04_f _ 2018_19						
Comment Code							

T2: Thin trees to allow visibility of the ground and room to flood fight.

Inspector Comment

No Photos

LM Start	1.49	Rating **	М	Issue No. 20			
LM End	1.56	Issue Type +	Ma	Location *	WS		
Category Earthen Levee				GPS Latitude/Longitude			
Calegory				Start		End	
Item	Trim / Thin Trees			38.2656	88°	38.264703	
item		-121.6026	35 °	-121.602327			
DWR ID	DWR_RD0501_04_f _ 2018_20						

## Comment Code

T2: Thin trees to allow visibility of the ground and room to flood fight.

## Inspector Comment



View looking downstream at thick trees on the waterside slope (November 2018)

LM Start	<b>1.64</b> Rating ** M			Issue No.		14	
LM End	1.75	Issue Type +	Ma	Location *	LS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Trim / Thi	n Trees		38.2635	87°	38.262028	0
пеш				-121.6020	68 °	-121.601688	0
DWR ID	DWR_RD0501_04_f _ 2017_14						
		_					

Comment Code
T2 : Thin trees to allow visibility of the ground and room to flood fight.

### Inspector Comment

Trim trees and undergrowth to allow inspection and access to landside slope and toe.

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 04 Sutter Slough	Right	2.28	03/12/2019 03/12/2019	David Julian

LM Start	1.74	Rating **	М	Issue No.		29
LM End	1.74	Issue Type +	En	Location *		
Supplemental			GPS Latitude/Longitude			
Calegory	Category			Start		End
Item	DWR UC	IP Field Study		38.26216	5°	38.262165 °
пеш				-121.60169 <sup>-</sup>	ı°	-121.601691 °
DWR ID	21076					

## Comment Code

## Inspector Comment

FS\_ID:44471 DS\_ID:21076 EP\_NO: 16906

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Crossing was running during site inspeciton. Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) along the landward slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances.

FİELD\_STRUCT\_DESC: 14-inch coated steel irrigation discharge pipe through the levee, 2.2 feet below the crown. Pump on a pile structure in the stream. Concrete standpipe on the landside (LS). Pipe exposed on the LS slope. Two conduits present: 3-inch conduit is disconnected, and 1.5-inch electrical conduit appears to be active. (Plans to replace an existing 10-inch pipe with a 14-inch irrigation pipe through the levee authorized under Permit No. 16906, 1998 - Neil R. Hamilton/DCC Engineering Company). [Additional Reference(s): DWR Levee Log, 2005].

FS Date: 6/13/2013

LM Start	1.74	Rating **	М	Issue No.	29 (cont)
LM End	1.74	Issue Type +	En	Location *	

## Photo 1 of 3: UCIP\_SP\_2019\_44471\_33491.jpg



Waterward side-pipe along slope.

## Photo 2 of 3: UCIP\_SP\_2019\_44471\_33495.jpg



Pipe section reduced at the waterward side daylight.

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 04 Sutter Slough	Right	2.28	03/12/2019 03/12/2019	David Julian

LM Start	1.74	Rating **	М	Issue No.		29 (cont)	
LM End	1.74	Issue Type +	En	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory	Category			Start		End	
Item	DWR UC	IP Field Study		38.26216	5°	38.262165	0
пеш				-121.60169	1°	-121.601691	0
DWR ID	21076						

## Comment Code Inspector Comment

FS\_ID:44471 DS\_ID:21076 EP\_NO: 16906

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Crossing was running during site inspeciton. Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) along the landward slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances.

FIELD\_STRUCT\_DESC: 14-inch coated steel irrigation discharge pipe through the levee, 2.2 feet below the crown. Pump on a pile structure in the stream. Concrete standpipe on the landside (LS). Pipe exposed on the LS slope. Two conduits present: 3-inch conduit is disconnected, and 1.5-inch electrical conduit appears to be active. (Plans to replace an existing 10-inch pipe with a 14-inch irrigation pipe through the levee authorized under Permit No. 16906, 1998 - Neil R. Hamilton/DCC Engineering Company). [Additional Reference(s): DWR Levee Log, 2005].

FS Date: 6/13/2013

## Photo 3 of 3: UCIP\_SP\_2019\_44471\_33496.jpg



Overview of waterward side.

LM Start	1.83	Rating **	М	Issue No.	8		
LM End	1.83	Issue Type +	En	Location *	LS		
Category Earthen Levee			GPS Latitude/Longitude				
Calegory			Start		End		
Item	Vegetatio	Vegetation			80°	38.260830 °	
пеш				-121.60150	)2 °	-121.601502°	
DWR ID	DWR_RD0	501_04_s _ 201	2_8				
	Comment Code						

V6 : Landscaping

## Inspector Comment

Large fig trees should be thinned and trimmed to allow inspection and access to levee slope and toe.

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 04 Sutter Slough	Right	2.28	03/12/2019 03/12/2019	David Julian

LM Start	1.86	Rating **	М	Issue No.		30
LM End	1.86	Issue Type +	En	Location *		
Category			GPS Latitude/Longitude			
Calegory	Category			Start		End
Item	DWR UC	IP Field Study		38.26040	)7°	38.260407 °
пеш				-121.6013	65 °	-121.601365 °
DWR ID	21077					

### Comment Code

## Inspector Comment

FS\_ID:32553 DS\_ID:21077 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) along the waterward and landward slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances.

FIELD\_STRUCT\_DESC: 14-inch steel irrigation discharge pipe through the levee, 8 feet below the crown. 2-inch electrical conduit of an unknown material through the levee, at an unknown depth. Siphon breaker on the landside (LS) slope. Pump on a pile structure in the stream. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959, (HLM 2.0)].

FS Date: 6/13/2013

LM Start	1.86	Rating **	М	Issue No.	30 (cont)
LM End	1.86	Issue Type +	En	Location *	



View of levee crown at crossing.

## Photo 2 of 3: UCIP\_SP\_2019\_32553\_59081.jpg



View of waterward side.

## **Levee Inspection Report By Mile - Spring 2019**

## Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 04 Sutter Slough	Right	2.28	03/12/2019 03/12/2019	David Julian

LM Start	1.86	Rating **	М	Issue No.		30 (cont)
LM End	1.86	Issue Type +	En	Location *		
Supplemental Supplemental			GPS Latitude/Longitude			
Calegory	Category			Start		End
Item	DWR UC	IP Field Study		38.26040	7 °	38.260407 °
пеш				-121.60136	5 °	-121.601365 °
DWR ID	21077					

## Inspector Comment

Comment Code

FS\_ID:32553 DS\_ID:21077 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) along the waterward and landward slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. FIELD\_STRUCT\_DESC: 14-inch steel irrigation discharge pipe through the levee, 8 feet below the crown. 2-inch electrical conduit of an unknown material through the levee, at an unknown depth. Siphon breaker on the landside (LS) slope. Pump on a pile structure in the stream. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959, (HLM 2.0)]. FS Date: 6/13/2013

Photo 3 of 3: UCIP\_SP\_2019\_32553\_59080.jpg



Waterward side--catwalk, conduit line, pump, and support piles.

LM Start	1.94	Rating **	М	Issue No.		21	
LM End	2.01	Issue Type +	Ma	Location *	LS		
Category Earthen Levee				GPS Latitude/Longitude			
Calegory				Start		End	
Item	Vegetatio	n		38.2593	82°	38.258367	
пеш				-121.6011	62 °	-121.600858 °	
DWR ID	DWR_RD0	501_04_f _ 201	8_21			·	

Comment Code

V2: Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment

No Photos

LS : Land Side WS : Water Side	N/A: Not Applicable
WS: Water Side	
00 0	

\* Location

: Acceptable Minimally Acceptable U : Unacceptable

N: Not Inspected/Rated C: Corrected A/W : Acceptable but Monitor & Maintain Issue Type

Ma: Maintenance Deficiency Ob: Design & System Obsolescence En: Enforcement

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 04 Sutter Slough	Right	2.28	03/12/2019 03/12/2019	David Julian

LM Start	2.15	Rating **	М	Issue No.		13
LM End	2.17	Issue Type +	Ма	Location *	LS	
Earthen Levee			GPS Latitude/Longitude			
Calegory	Category			Start		End
Item	Trim / Thi	n Trees		38.25627	5°	38.255990°
пеш				-121.60093	3°	-121.601015°
DWR ID	DWR_RD0	501_04_s _ 201	2_13			

Comment Code

T1: Trim trees to at least five feet above ground level.

## Inspector Comment

Thin out the trees along levee mile 2.15-2.17 and trim them up at least 5 feet above the ground.

No Photos

LM Start	2.16	Rating **	М	Issue No.		31	
LM End	2.16	Issue Type +	En	Location *			
Supplemental				GPS Latitude/Longitude			
Category				Start		End	
Item	DWR UC	IP Field Study	,	38.25622	25 °	38.256225 °	
пеш				-121.60090	)3 °	-121.600903 °	
DWR ID	21078						

## Comment Code

## Inspector Comment

FS\_ID:32863 DS\_ID:21078 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Broken concrete box on landward slope. Disturbed soil on waterward slope--unable to determine section disturbed. Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) along the waterwar slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances.

FİELD\_STRUCT\_DESC: \*ABANDONED\* 6-inch and working 6-inch steel irrigation discharge pipes through the levee, 2.5 feet and 5 feet below the crown, respectively. Pipes are within 5 feet of each other. 1.5-inch electrical conduit of an unknown material through the levee, at an unknown depth. Pump in a pump house on the waterside (WS) slope. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959, (HLM 2.3)].

FS Date: 6/13/2013

## Photo 1 of 3: UCIP\_SP\_2019\_32863\_59483.jpg



View of levee crown at crossing.

## **Levee Inspection Report By Mile - Spring 2019**

## Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 04 Sutter Slough	Right	2.28	03/12/2019 03/12/2019	David Julian

LM Start	2.16	Rating **	М	Issue No.		31 (cont)
LM End	2.16	Issue Type +	En	Location *		
Category Supplemental			GPS Latitude/Longitude			
Calegory	Category			Start		End
Item	DWR UC	IP Field Study		38.25622	25 °	38.256225 °
пеш				-121.60090	)3°	-121.600903 °
DWR ID	21078					

### Comment Code

## Inspector Comment

FS\_ID:32863 DS\_ID:21078 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Broken concrete box on landward slope. Disturbed soil on waterward slope--unable to determine section disturbed. Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) along the waterwar slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 6-inch and working 6-inch steel irrigation discharge pipes through the levee, 2.5 feet and 5 feet below the crown, respectively. Pipes are within 5 feet of each other. 1.5inch electrical conduit of an unknown material through the levee, at an unknown depth. Pump in a pump house on the waterside (WS) slope. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 105, April 1959, (HLM 2.3)].

FS Date: 6/13/2013

LM Start	2.16	Rating **	М	Issue No.	31 (cont)
LM End	2.16	Issue Type +	En	Location *	

## Photo 2 of 3: UCIP\_SP\_2019\_32863\_59484.jpg



View of waterward side with dense vegetation along slope.

## Photo 3 of 3: UCIP\_SP\_2019\_32863\_59480.jpg



View of waterward side--conduit, pump, control panel, and pipe. Soil piled on right corner of photo--excavation?

N: Not Inspected/Rated C: Corrected A/W: Acceptable but Monitor & Maintain Issue Type Ma : Maintenance Deficiency Ob: Design & System Obsolescence

En: Enforcement

## **Levee Inspection Report By Mile - Spring 2019**

## Reclamation District No. 0501 Ryer Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 04 Sutter Slough	Right	2.28	03/12/2019 03/12/2019	David Julian

	1						
LM Start	2.17	Rating **	M	Issue No.		17	
LM End	2.28	Issue Type +	En	Location *		LS	
Category	Earthen L	evee		GPS Latitude/Longitude			
Category				Start		End	
Item	Vegetatio	Vegetation			87°	38.254465 °	
item				-121.6009	93 °	-121.601450 °	
DWR ID DWR_RD0501_04_s _ 2017_17							
		Comn	nent Cod	le			
V6 : Lands	caping						
Inspector Comment							
Landside landscaping should be thinned and managed to allow inspection and access to levee slope and to and 10' easement.							

# Photo 1 of 1 : SP\_2019\_RD0501\_172\_17\_20190311\_00005.jpg

View of landside landscaping on levee slope